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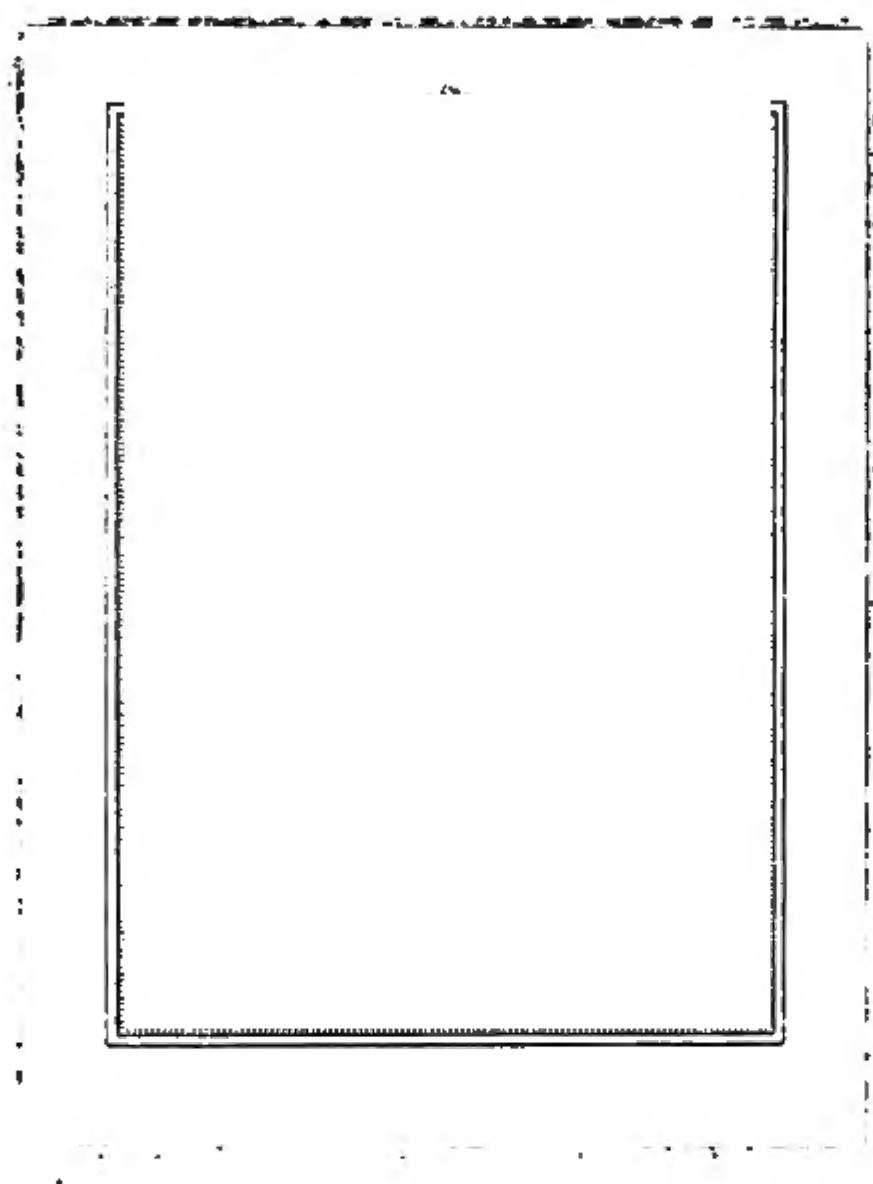
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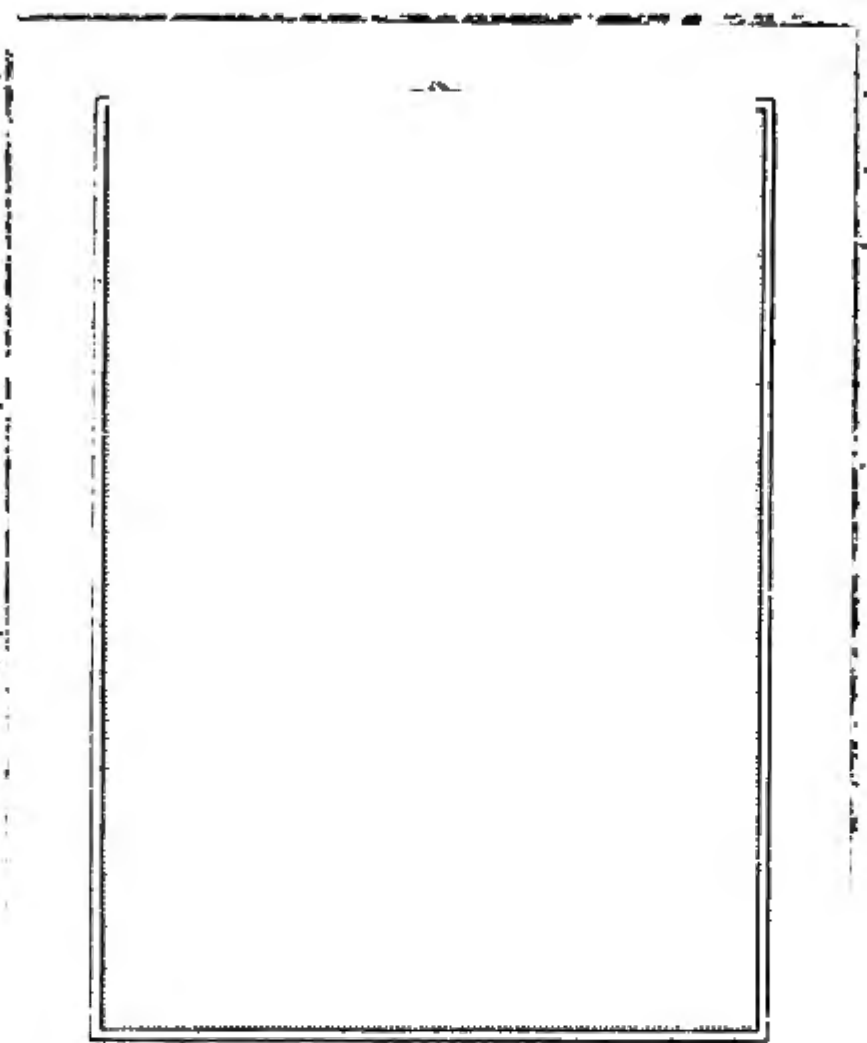
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U. S. DEPARTMENT OF LABOR

CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

**FACILITIES
FOR CHILDREN'S PLAY IN THE
DISTRICT OF COLUMBIA**

MISCELLANEOUS SERIES No. 8

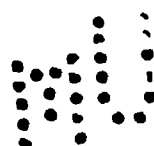
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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,

CHILDREN'S BUREAU,

Washington, December 5, 1916.

SIR: I transmit herewith a report on facilities for children's play in the District of Columbia.. This report necessarily touches upon recreation facilities in general, because children share in many of them; but its especial purpose is to show the present equipment for children's use and to suggest the further provisions for outdoor life needed for children of different ages.

The study was undertaken at the request of Mr. Oliver P. Newman, president of the Board of Commissioners of the District of Columbia, and has been made by the Children's Bureau and the playground department of the District of Columbia with the co-operation of various agencies. The detailed survey by health districts was planned and carried out under the direction of Mr. Edgar S. Martin, then supervisor of playgrounds of the District of Columbia, and Dr. F. A. McKenzie, now president of Fisk University. The charts were prepared by the playground department and completed under the direction of Mrs. Susie Root Rhodes, the present supervisor of playgrounds. The bureau is indebted to the courtesy of the Office of Public Buildings and Grounds for the map. Especial mention should be made of the assistance rendered by the board of education and officials of the public schools, by the District health department, the District engineer department, and the Metropolitan police. The report has had the benefit of criticism and advice from Mr. E. B. De Groot, head of school recreation facilities in San Francisco. Mr. De Groot was in charge of the first large development of playground facilities in this country, that of the South Park Board, in Chicago, and the section on principles of public recreation is based on a statement prepared by him for the Children's Bureau.

The president of the Board of Commissioners and the Chief of the Children's Bureau united in inviting the aid of a volunteer committee to advise upon various suggestions made as to the location of play spaces. This committee consisted of Rev. John Van Schaick, jr., president of the board of education; Mrs. Ernest P. Bicknell, of

the board of children's guardians; and Col. W. W. Harts, officer in charge of public buildings and grounds. The bureau is indebted to them for most careful and discriminating reading of the report and for advice based upon intimate acquaintance with the District. The material has been put in final form for publication by Miss Anna Rochester and Mr. Howard C. Jenness, of the Children's Bureau.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

Hon. WILLIAM B. WILSON,
Secretary of Labor.

FACILITIES FOR CHILDREN'S PLAY IN THE DISTRICT OF COLUMBIA.

INTRODUCTION.

The skillful planning of a French engineer, L'Enfant, made the original city of Washington beautiful with parks and open squares. A century later a commission of experts drafted plans for the development of the new park system which will ultimately encircle the city with a double chain of parks, extending at several points to the boundaries of the District, carefully laid out to preserve and heighten every kind of natural beauty that the District possesses.¹

These open squares and outlying parks can not meet the daily play needs of children, and this report is an attempt to measure these needs and to formulate a general plan for satisfying them. The study has been concerned primarily with the play needs of children—that is, of all persons under 21 years of age; but in order fairly to present their needs and opportunities all the recreation facilities of Washington have been reviewed.

The report aims to present (1) the facts concerning density of population in Washington with special reference to children (pp. 7 to 17); (2) the types of recreation facilities which should be available in any city (pp. 17, 18); (3) the recreation facilities in Washington and their administration, with recommendations concerning their future development (pp. 18 to 32); (4) detailed information concerning population, school buildings, and playgrounds and other recreation facilities in 25 health districts (pp. 32 to 59); and (5) a summary of the report (pp. 60, 61).

HAS WASHINGTON A CONGESTED POPULATION?

Persons who go through Rock Creek Park, around the Speedway, or out Sixteenth Street to the reservoir and then eastward to the Soldiers' Home hardly think of Washington as a congested city. And where these people go no congestion exists. However, if any of these pleasure seekers should turn off the Speedway and

¹ The Improvement of the Park System of the District of Columbia. (57th Cong., 1st sess., S. Rept. No. 166.)

strike into the section known as "South Washington," or should drive east from Sixteenth Street through the district south of Florida Avenue, they would find neighborhoods not only badly congested but almost totally unprovided with recreation facilities. Some neighborhoods with a population as big as many towns have no play spaces for children and no means of recreation for adults except motion pictures, pool rooms, and saloons.

When the District of Columbia was set aside for Federal purposes, L'Enfant laid out a city plan with streets running north and south and east and west and broad avenues cutting obliquely across the city. The boundary of Washington on the west was Rock Creek; on the east the Anacostia River; and Florida Avenue was roughly the northern boundary. The Potomac River lay to the south, and what is now "South Washington" was then called "the island" because of creeks that separated it from the region north of Pennsylvania Avenue NW.

That was "old Washington." The rest of the District of Columbia was called "the county." All that is now Mount Pleasant, Cleveland Park, Le Droit Park, Anacostia, Petworth, and the other northern and northwestern sections outside of Florida Avenue, etc., was farm and forest, and not until the last two decades has there been any marked development. Georgetown was a separate municipality at first.

Because of a lack of car lines and of city improvements in the way of water, light, good roads, fire protection, etc., the development of the city was for nearly a century within the bounds laid down by L'Enfant. Within these bounds the greatest density of population and greatest lack of recreation facilities are to be found.

Outside, in "the country"—in Chevy Chase, Cleveland Park, Petworth, and all the other suburbs, and in the Mount Pleasant district—there were, in 1913, 119,212 inhabitants, scattered in sections with widely different conditions: one, in Mount Pleasant, with a density of 64.8 to the acre; others in which farms are still flourishing. The average population density of all the health districts outside of the original city was about 7 to the acre.

Figures show that this region outside of the original city limits is growing rapidly. The police census begun April 10, 1907, gave 87,896 persons living in the District of Columbia outside of the original limits of Washington, while six years later the census begun April 28, 1913, showed for the same area a population of 119,212. In 1907 the original city had a population of 241,695, while in 1913 the population for the same area was 234,085.¹

¹ The census of 1915 has been made available since this study was compiled and shows that the same shifting of population has continued. Original city in 1915, 226,989; county, 130,760.

Table showing population of District of Columbia in original city and in "the county" at five successive censuses by the police.

	Original city.	County.
1907 -----	241,695	87,896
1908 -----	247,323	92,080
1909 -----	244,180	98,823
1912 -----	238,346	114,590
1913 -----	234,085	119,212

The population of the original city has steadily decreased since 1908 at an average rate of about 1 per cent a year, while the population of "the county" has increased about 5.8 per cent a year during the same period. As business encroaches on residence districts the inhabitants of the city are obliged to crowd more closely together. The actual decrease in the population does not compensate for the steady increase in the amount of property used entirely or partly for business purposes.

An observer has only to traverse the length of Columbia Road to note the tendency toward large apartment houses which afford no ground for outdoor life for tenants. Between January 1, 1911, and July 1, 1916, 384 multiple dwellings were opened for occupancy in the 20 health districts of the old city and in Georgetown, and 93 multiple dwellings in the new outlying districts. In addition, 131 apartment houses were in course of construction on July 1, 1916, of which 33 were in outlying sections. The need of playgrounds for small children and airing places for babies with mothers and nurses is already evident even in the favored district along Columbia Road, and it is obvious that unoccupied property privately owned will not afford permanent provision.

It is well to remind ourselves that old Georgetown was a playground for the grandfathers of the present younger generation of the city. East of Lincoln Park "the commons" was a baseball ground for the entire eastern section of the city. Georgetown is now crowded with people, and "the commons" is now studded with rows upon rows of houses built within the last two decades. Who can say that 20 years more may not see the same brick and asphalt development in the suburban sections of the present day?

Two-thirds of the 100,000 young people of Washington, together with nearly 170,000 adults, lived in 1913 within the boundaries of the original city, which includes all land lying south of Florida Avenue and east of Rock Creek and is approximately $4\frac{1}{2}$ miles long and averages about $2\frac{1}{4}$ miles in width. In comparison with the density of population on Manhattan Island, where 2,500,000 people live on a strip of land 10 miles long and about 2 miles wide, or in comparison with the dense populations of other great industrial cities, the condition in Washington does not suggest a high degree

of congestion. The greatest density was found in the 59 blocks¹ where the number of inhabitants per acre was from 200 to 299, and in 9 little congested spots² where they averaged 300 or more to the acre.

Yet the spacious streets and low-built dwellings, and the open squares which dot certain sections of the city, by their very contrast to conditions elsewhere, tend to obscure the facts about space available for play. Street area does not serve for recreation. Street play at best is a sorry makeshift, and in Washington it is forbidden by law. Here the street area is officially measured not from curb to curb but from building line to building line, and sidewalks are not legally available for play. When the streets, occupying more than half the acreage of the original city, were excluded, as they must be in any practical consideration of density in relation to play, there remained, in 1913, 2,615 acres for the 234,085 persons living in the old city, or an average of 89.5 to the acre.

Further, we find that when street areas were excluded 9³ of the 20 health districts of the old city had population densities varying from 100.2 to 135.8 per acre, and in these 9 districts lived 102,956 adults and 36,271 children and young people under 20 years of age. Only 4.414 (or approximately 1 in 15) of the children and young people in the original city lived in the 3 districts⁴ where population density was less than 50 persons to the acre.

North of the original city 3 other health districts⁵ showed a density of population greater than 50 persons to the acre. And it should be noted that in the whole northern section of the city, which has been growing rapidly in recent years, the streets are narrower than in the original city⁶ and little provision has been made for reserving frequent small open spaces as park areas.

Let us look now at some of the more closely built up neighborhoods in the original city.

In the heart of the city is an old neighborhood, district No. 10, bounded on the north by K Street NW., on the east by North Capitol Street, on the west by a zigzag line composed of Seventh Street be-

¹ Fifty-six blocks in health districts 1 to 20; three in health districts 33 and 38.

² Triangle bounded by South Carolina Avenue, Twelfth Street, and C Street SE; square bounded by Second, M, and N Streets SW, and James Creek Canal; triangle bounded by Virginia Avenue, Seventh Street, and I Street SE; square bounded by Ninth, Tenth, and K Streets and New York Avenue NW; triangle bounded by New Jersey Avenue, Fourth Street, and N Street NW; triangle bounded by Vermont Avenue, Eleventh Street, and R Street NW; triangle bounded by Seventeenth Street, V Street, and Florida Avenue NW; triangle bounded by Maryland, Eighth Street, and D Street NE; triangle bounded by Fourteenth Street, H Street, and Florida Avenue NE.

³ Health districts Nos. 1, 3, 5, 6, 9, 10, 11, 15 and 17.

⁴ Health districts Nos. 4, 12, and 20.

⁵ Health districts Nos. 33, 35, and 36.

⁶ In 20 health districts of original city, streets measured from building line to building line occupy 54 per cent of the area. In the newer districts north of the city, streets occupy only 30 per cent of the total area.

tween G and K Streets, Fifth Street between D and G Streets, and John Marshall Place between D Street and Pennsylvania Avenue, and on the south by Pennsylvania Avenue and D Street. It is a neighborhood in which development seems to have ceased, so far as building operations go, and which has a mixture of residential and business population. None of the blocks with greatest density, 300 or more to the acre, were to be found here, but six blocks within this district had from 200 to 299 persons to the acre. Of the total population of 15,693, 2,722 were white people under 20 years of age, and 909 were colored young people under 20. The children of grade-school age¹ who are in special need of play space numbered 1,245 white and 381 colored.

This district is one of the neediest so far as recreation facilities are concerned, notwithstanding the fact that a portion of the Capitol grounds as well as the Botanic Garden, with their "keep off the grass" warnings, fringe the southern boundary; that it has in its midst the great Judiciary Square; and that it is dotted with little "triangles," parks of a few square feet. These open spaces, however, have few benches for adults or sand piles for children. Only one of the four schools in this neighborhood has a school playground open for a few weeks in the summer, and one of the others has a yard equipped for play.

Northwest of district 10 and touching it tip to tip at the square occupied by the Public Library is another populous district, No. 6, in the heart of the business section, where 17,097 people lived in 1913. Its boundaries are New York Avenue on the south, Fifteenth Street on the west, Seventh Street on the east, and Rhode Island Avenue on the north. It had one block, bounded by Tenth Street, K Street, and New York Avenue, on which the densest population was to be found, over 300 to the acre. As in other neighborhoods in the heart of the city, business has crept along the main streets, and many people live in apartments over stores with no place for the children to play.

The population of this district included more than 3,000 young people, of whom 2,384 were white and 692 colored.² For these young folk the opportunities for other than commercial recreation are limited. The Strong John Thomson School has a yard equipped for play, and Franklin Park, one of the most spacious and beautiful of the city squares, is in this district. It offers no play facilities, however, except a sand pile for the small children. The greatest blessing in the neighborhood is the Public Library, which is used by people from all parts of the city and offers a variety of social, intellectual, and recreational opportunities for its neighbors.

¹ Five to 14, inclusive.

² White, 588 under 5 years, 1,100 from 5 to 14, and 696 from 15 to 19; colored, 187 under 5, 201 from 5 to 14, and 204 from 15 to 19.

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The boundaries of health district No. 7 are Third Street and John Marshall Place between Missouri Avenue and D Street, Fifth Street between D and G Streets, and Seventh Street between G Street and New York Avenue on the east; New York Avenue on the north; Fifteenth Street on the west; and B Street and Missouri Avenue on the south. This district has the largest and perhaps the best-attended of the motion-picture houses and the city's theaters, many of the banks, and the big hotels. At first glance it seems so purely and simply a business district with a daytime population that one is surprised to learn that 8,245 people resided in it in 1913. Of these, over 1,000 were white young people under 20 years of age and about 100 colored young people. Practically the entire space is given over to streets and buildings, and those who live in this neighborhood have little place for outdoor recreation except the streets. The children of this section, hedged in by buildings, do not have ready access to free play spaces since the nearest playgrounds are not within walking distance.

Standing in the portico of the House of Representatives and looking directly southward toward the Potomac River one can take in at a glance all of "South Washington," or what is known on the health-district maps as districts Nos. 8, 11, and 12. The population in one of these three health districts—No. 11—is overwhelmingly colored, and some of the bad alley conditions to be remedied under the new alley-elimination law are there within sight of the Capitol. The houses are not thickly set, but the need for recreation facilities is great. It is a neighborhood where a majority of the people are earning small wages.

South Washington extends from the wharves of Washington Harbor on the west all the way to the long, straight, and unbeautified South Capitol Street on the east. Yet the children of school age, of whom there were, in 1913, 2,937 white and 1,877 colored, find in all this area, even in midsummer, only four playgrounds, the Bowen and Jefferson School Playgrounds for white children and the Cardozo and Willow Tree Park Municipal Playgrounds for colored children. They find only two small school yards with play equipment, the Fairbrother for the white and the Bell for the colored. The Arsenal Grounds are in this section and are used by the employees of the Arsenal for various sports.

The river stretches a long way around South Washington, but no open land or pavilion is provided from which men, women, and children can enjoy the waterside breezes on a hot night.

The strip of South Washington which has the largest and densest colored population goes in a straight belt from the Capitol Grounds and the Botanic Garden south to the river, between South Capitol Street on the east and Four-and-a-half Street on the west. James

Creek, which helped make the one-time "island," is being filled in for sanitary reasons, and it is hoped that it may serve as a boulevard, with a long narrow parkway and a drive on either side.

Special need for social centers and other play facilities exists in the neighborhood known as health district No. 9, bounded on the north by Florida Avenue, on the south by K Street, on the west by Seventh Street, and on the east by North Capitol Street. Seventh Street carries retail business all the way to the end of this neighborhood, but in general it is a dense residential section. One block has over 300 people to the acre—the triangle at Fourth Street, N Street, and New Jersey Avenue NW.

The 19 schoolhouses of the neighborhood include the new Dunbar High School between N and O Streets NW., the McKinley Manual Training School, the old Central High School, and the Armstrong Manual Training School, but none of them has been a center for social activities. For the 3,401 white young people and the 3,222 colored young people in this district even in summer only three playgrounds are provided—one district playground and one school playground for white children, and one school playground for colored children. Two of the other white schools and one of the other colored schools have yards equipped for play.

Just south of the new Central High School is a district very poor in recreation opportunities which will in all probability use the facilities to be developed in connection with this school. On the map this district is No. 5, bounded by Rhode Island Avenue on the south, Fifteenth Street on the west, Florida Avenue on the north, and Seventh Street on the east. It is a crowded residential district with sparse recreational facilities for the 2,000 white and the 2,500 colored young people. The Grover Cleveland School is widely used as a community center. The colored Y. M. C. A. is at Twelfth above S Street. But the two colored schools—Garnet and Patterson—offer no recreational opportunities except small yards equipped for play; and Iowa Circle, the one public space in the neighborhood, has benches but no special facilities for children's play.

No survey of Washington would be complete without mentioning the 273 inhabited alleys of the city, many of them winding, intricate, interior courts, with odd little streets and byways within the block. They contain, according to the police census of November 1, 1915, 9,526 inhabitants—888 white and 8,638 colored. The squalor and insanitary conditions produce a mortality rate within the alleys which is almost twice that upon the streets. One of the worst of these courts, Willow Tree Alley, containing 60 houses where between 300 and 400 Italians and colored people lived together in seclusion, has been torn out and made into a playground. A recent act of

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... As a
... were asked to name all
... the in-
... occupations were
... only 7 by as many
... 243; football by 190;
... 131; music by 113;

... and of the colored children 65.5
... they worked on Saturday.

social instinct in its wider expansion tends to find expression in organization. Naturally, from the mode of gathering the data, the Girl Scouts, and the Camp Fire Girls led in the list of organizations, yet out of the 1,200 only 131 belonged to these new organizations; 124 boys and 90 girls said they did not belong to any organization and did not care to belong; while 90 boys and 85 girls said they had no opportunity to belong.

The greatest of all commercial amusements for children is, of course, the motion pictures. Nearly all of the 1,200 children "went to the movies." Three-fourths of the white boys under 15 and practically the same proportion of those over 15 saw a motion picture at least once a week. Of the white girls about 63 per cent, of the colored boys 65 per cent, and of the colored girls about 40 per cent saw the pictures at least once a week. Only a few reported that they never went.

Of the white boys 361 and of the white girls 274 went on summer vacation trips. Hiking was known to 313 of the boys and 191 of the girls. Nearly all read; many attended vaudeville and stock-company shows; 105 boys and 18 girls bowled. Yet they wanted "something to do." These same boys and girls asked for more playgrounds and athletic grounds and gymnasiums; the largest demand was for swimming pools.

DANGERS OF STREET PLAY.

City streets have never been desirable playgrounds, and with the increase of swift and heavy traffic their dangers are greater to-day than ever before. In Washington neither streets nor sidewalks—no part, in fact, of the area between building line and building line—may legally be used for play, under penalty of arrest. In the most closely built sections of the District 54 per cent of the area is thus officially closed to children.

Practically, what happens to the children when adequate play space is not provided? Under the act for the preservation of the public peace and the protection of property within the District of Columbia¹ 655 of them were arrested as "criminals" and brought before the juvenile court from July 1, 1914, to June 30, 1915; in the year ended June 30, 1914, 975 were arrested.

The chief probation officer of the juvenile court is the authority for saying that most of the arrests of children for "unlawful assembly" are made in the second police precinct, which is a direct argument for more playgrounds. The second precinct is bounded by K Street on the south, Q Street on the north, Fif

¹ For sections of the act, see

the west, and First Street NE. on the east. In it were in 1913 more than 35,000 inhabitants, including over 6,500 children under 16 years of age. And, as has been shown in another section, this part of the city is pitifully lacking in play facilities. In the entire precinct, which covers about 1.5 square miles, are only three playgrounds; the few Government reservations are merely small triangles or parkings.

In that precinct most of the arrests of children for playing in the streets are made in the eastern half—between Seventh Street NW. and First Street NE. The reason is almost instantly apparent to any one who knows the geography of that eastern half. Seventh Street is a narrow and intensely busy thoroughfare, lined with shops and stores, motion-picture theaters, and everything that goes to make a retail street. Crowding upon it from all sides are cross streets in which people live at the rate of 200 to 300 or more an acre. Scores of the shops in Seventh Street have family apartments above the first floor. There are no front yards and scarcely any back yards worthy of the name in the business and semibusiness sections. Of the area 46 per cent is in houses and 54 per cent in streets. Playgrounds are so scarce that the children play their games on the streets, and the records of No. 2 police station show that merchants and householders are quick to invoke the law of unlawful assembly when the play of the children irritates them.

In the center of the city boys under 17 are sometimes arrested for standing in front of motion-picture theaters. It would seem that they have to keep "moving on" in a region where there is nothing for them to move toward except more streets. Anyone who notices a boy or a girl standing still on the street may invoke the law of unlawful assembly and have that child taken to the juvenile court. It is refreshing to learn from the records and from observation at the court that when the whole majesty and machinery of the law is thus employed to break up play on the streets the guilty criminals are not subjected to the limit of punishment provided for in the act. Each case is treated with a common-sense understanding of the situation.

Probation officers who have studied the child and street problem in Washington say that many arrests of newsboys for selling papers without a license are directly traceable to a lack of playgrounds. One probation officer said: "They want excitement of some sort, and selling 5 or 10 newspapers furnishes just the element of activity they seek. They would be off the streets and much better employed if there were more playgrounds."

"The little street larcenies, thefts of bananas, peanuts, newspapers, and the other things that children 'swipe' for excitement are in many cases also traceable to a lack of playgrounds," said another probation officer. "We have noticed that when some attention was given to a

small boy who would steal small things, and he was taken to a playground and kept busy there, he refrained from all mischief."

The restriction of children's play puts upon the community a special obligation to provide spaces where all children can legally play without danger to themselves and annoyance to others. So long as city neighborhoods are left barren of opportunity for safe and legitimate play, so long will high spirits and ingenuity and the normal boy's desire for activity involve the possibility of a court experience.

GENERAL PRINCIPLES OF PUBLIC RECREATION.

Of the three necessary elements of successful recreation—space, equipment, and leadership—leadership is perhaps the most important. The ability of the leader determines whether play space and play equipment will hold the interest of children accustomed to the irresponsibility of the street and the effortless pleasures of the motion pictures. This, at least, public recreation must accomplish. It must successfully compete with the various dangers and excitements of the streets and of commercialized recreation. If it renders this minimum service it justifies its claim on the community's purse.

Public recreation should do more. It should stimulate self-expression and afford the discipline of high-spirited team play. Under leaders who not only win the interest of children but have the skill and training to guide their activities the playground makes a contribution to the community no less definite, no less constructive than the schools.

The space and equipment for children's recreation group themselves roughly in three main divisions corresponding to three age groups:

Little children less than 6 or 7 years old can not travel far from home, and in all districts where yards are not available for play at every doorstep there should be many small open spaces with benches for mothers and such simple equipment as sand boxes and shallow wading pools. Since these children rarely use a play space as much as one-quarter of a mile from home, the city should be dotted with small play retreats not more than one-half mile apart. Experience has shown that the play space for little children should be distinct from that for older children; therefore, when the playgrounds for school children are not large enough to provide a corner for the exclusive use of little children, additional space or separate land should be provided.

For children of the next age group—roughly, 7 or 8 to 12 or 13 years old—play centers of a different type are needed. An open space, divided into two parts, one for boys and one for girls, is the

first requisite. Apparatus for gymnastics and basket ball, a small diamond for playground ball, a swimming pool, and tennis courts are among the accepted types of equipment. Gardens, cultivated under supervision, combine wholesome exercise and instruction and form a valuable addition to a play center. All these depend for their development upon the area available, and the more varied the activities which can be carried on simultaneously the more useful the playground. These older children do not habitually go much more than half a mile to a playground, hence such playgrounds should be not more than a mile apart. It is found desirable and economical to have such play centers either on school grounds or adjacent to school buildings. In every playground which is not used in connection with a school a shelter house for story-telling and indoor games is desirable.

For adolescents, whether in the upper grades, in the high schools, or at work, larger spaces and equipment for all sorts of athletics and outdoor games are needed, distinct from the playgrounds of younger children. For this type of athletic center distance from the homes is not so important a factor, but one such center should be easily accessible to every section of the community. These young people and adults of all ages need recreation centers for dancing, dramatics, games, clubs, lectures, and other indoor and evening activities. Indoor swimming pools and gymnasiums are valuable additions to any play center except the play spaces for little children.

PUBLIC RECREATION FACILITIES AND THEIR ADMINISTRATION.

The United States Government, the District government, and the public schools maintain three separate systems of recreation facilities in the District.

The Chief of Engineers of the United States Army has exclusive charge of public parks and open land belonging to the Federal Government. Federal park land in the District of Columbia is under a division of the Chief of Engineers' office known as the Office of Public Buildings and Grounds, and responsibility for maintenance of such recreation facilities as are provided in the Federal parks rests with the officer in charge. These facilities include baseball diamonds, polo grounds, tennis courts, and space for other forms of outdoor sport. They are intended primarily for adults, and no play supervision is undertaken by this office.

The Commissioners of the District of Columbia are responsible for land belonging to the District and have assigned to the District department of playgrounds the control of such District land as is used for municipal playgrounds. This department is also conduct-

ing supervised playgrounds on Federal land assigned by the Chief of Engineers¹ and by the Interior Department,² and on private land lent for public use.³ The department of playgrounds has also had from time to time the use of one piece of school land for baseball.⁴ The total number of municipal playgrounds open during 1914 was 13, and during 1916, 12.⁵ In addition the department has supervised baseball on two fields.

The board of education is responsible by law for the use of land belonging to the public schools, and the board has placed under the charge of the director of physical training in the public schools the details of equipment and supervision of play in school yards.⁶ Supervised playgrounds in school yards are maintained for six weeks in the summer; 17 were open during the summer of 1914 and 20 during the summer of 1916.⁷

Each year since 1909 Congress has appropriated \$900 or \$1,000 for grading and equipping for play 6 additional school yards; it also provides for the maintenance and repair of apparatus. Up to the present time (summer of 1916) 60 school yards (44 white and 16 colored) have been equipped from these appropriations. In addition, 6 school yards (4 white and 2 colored) have been equipped from private funds. The appropriation does not, however, cover the cost of salaries for play supervisors. The expenses of the 20 summer playgrounds in school yards are therefore largely met by private subscriptions. Teachers in the schools are employed as play leaders, and their work, although paid partly from private funds, is under the direction of the school director of physical training.

The president of the board of education, the president of the District Commissioners, and the officer in charge of public buildings and grounds act as an ex officio committee on recreation for cooperation and consultation upon matters involving a joint policy.

Facilities for little children's play.—Washington had in 1913 more than 100,000 children and young people under 20 years of age. Twenty-nine thousand were children under 5 years of age, and at

¹ Bloomingdale, Willow Tree Park, Garfield Park, and Virginia Avenue Playgrounds. Also supervised baseball (no equipment) at Reservation 19, Sixth and L Streets SE.

² Howard Playground.

³ Gallinger, Mount Pleasant, New York Avenue, and Wilcox Playgrounds. Also supervised baseball on Bruce diamond.

⁴ On same block with Henry School summer playground. Not used by playground department, summer of 1916.

⁵ Summer of 1916: Twelve municipal playgrounds—nine for white children and three for colored children. Also two athletic fields and two play stations. See page 65.

⁶ At a meeting of the board of education in September, 1916, the following motion prevailed: "That the board of education grant the supervisor of municipal playgrounds the use of all school grounds not operated by the schools, to be used as play centers for the children of the District, with the understanding that arrangements must be made with school authorities for safeguarding buildings opened in whole or in part."

⁷ Summer of 1916: Fifteen supervised school playgrounds for white children and five for colored children.

least another 5,000 were 5 or 6 years old. In the old city, where two-thirds of these children lived, the streets and squares give the appearance of abundant space, but there are large areas in the old city and in some of the thickly settled neighborhoods beyond its boundaries where little children must depend on doorstep and sidewalk for their play. As already noted, sidewalk play in Washington is forbidden by law. Open squares without benches are useless to mothers and nurses with their charges, and carefully tended shrubbery and lawns and flower beds do not invite the older babies' play.

Seven of the open squares have sand boxes.¹ Sand boxes are provided on each of the 12 District playgrounds and 20 school summer playgrounds also, but except at the Rosedale, Bloomingdale, Georgetown, Howard, and Cardozo Playgrounds space is too limited to permit of seclusion from the more active play of older children. Equipment for little children such as was formerly offered in the Zoo Park and is planned in Potomac Park would add to the attractiveness of the parks for family excursions, but could never serve the daily needs of mothers and little children other than the few whose homes overlook these parks.

The distances are great between the seven play centers for small children in open squares. Existing spaces for rest in the open air for mothers and quiet play for little children are plainly inadequate.

Facilities for play for children of school age.—The next age group for which exact population figures are available shows 48,000 children between 5 and 14 years. Some of these children are younger and some are older than those for whom the playgrounds are primarily adapted.² But since Washington's play facilities for little children and for young people are inadequate, the playgrounds are actually used by children even younger and older than the 48,000 in this age group.

The District offers three types of play spaces adapted to the tastes and needs of children 6 to 13 years old:

1. Sixty-six³ of the schools have play spaces around the buildings, with simple play equipment, but in 46 of these no leadership is provided. Attendance in these unsupervised school yards is negligible in summer or outside of regular school hours, and many of them are too small to serve the children of the neighborhood even if they did come.

¹ Lafayette Square, Franklin Square, and Reservation 16 at K and Sixth Streets SE. in 1914. To these have since been added Washington Circle, Dupont Circle, Judiciary Square, and Stanton Square.

² During the school year ended June 30, 1915, 38,737 children were enrolled in the first six grades of the public schools. Of these, 26,056 were white and 12,681 were colored. Report of the Board of Education to the Commissioners of the District of Columbia, 1914-15, p. 50.

³ Summer of 1916: Forty-eight white and 18 colored. School year 1914-15: Thirty-nine white and 15 colored.

2. Twenty of the larger school yards are open for six weeks in summer, with play leaders and instruction.¹

3. Twelve municipal playgrounds are open, with supervision, for 10 months of the year.²

During the six summer weeks, therefore, when the school yards are in use, there are 32 centers of supervised play for children of grade-school age, 24 for white children and 8 for colored. Fourteen of the white playgrounds and 5 of the colored playgrounds are in the 20 health districts of the old city and must meet the needs of some 30,000 children,³ many of whom are more than half a mile from any playground.

Accurate estimates of the number of different children who are in the habit of using playgrounds are extremely difficult to make. Special records were kept during the year 1914 for this study.⁴ The District playgrounds estimated an average weekly attendance of 7,410 different children during the summer weeks and of 10,084 different children during the spring and fall. It is admitted, however, that this is an overestimate, since the same child may have been entered more than once during the week. The school summer playgrounds used a different method of checking attendance, and the director estimates that in 1914 the number of different children using the playgrounds each week averaged 4,871. During that summer there were in all 13 playgrounds for white and 4 for colored children within the 20 health districts of the original city, for which these estimates show an average weekly attendance of 6,111 white children and 1,247 colored children. In other words, with the most generous interpretation of the attendance figures, the facilities in use in 1914 within the boundaries of the old city were used by less than one-third of the 20,647 white children 5 to 14 years old, and about 1 in 8 of the 9,602 colored children of the same ages living in these districts.⁵

It seems plain that the play needs of the city's children are not met. The 12 municipal playgrounds (summer of 1916) are scattered through the city from Rosedale to Georgetown and from Mount Pleasant to Virginia Avenue SE., but the distances between them are long; and even in summer, when the school playgrounds are open,

¹ Summer of 1916: Fifteen white and five colored. Summer of 1914: Twelve white and five colored.

² Summer of 1916: Nine white and three colored. Summer of 1914: Ten white and three colored.

³ Health districts 1 to 20 show population 5 to 14 years, inclusive, 20,647 white and 9,602 colored.

⁴ See tables, pp. 65, 66.

⁵ Since then (in 1915) a new colored playground has been opened at Willow Tree Park, increasing by a few hundred the number of children reached by public play facilities in southwest Washington. A few of the colored children on the northern edge of the original city are provided for by the Howard Playground, which is not quite half a mile beyond Florida Avenue. Two additional school summer playgrounds for white children have been opened in the original city at the Force School and the Bryan School in northwest and southeast Washington, respectively.

many hundreds of homes are beyond the half-mile radius that a playground can effectively serve.

In addition to its 12 regular playgrounds the municipal playground department opened, during the summer of 1916 two "play stations" on vacant lots in thickly populated neighborhoods not within reach of an equipped playground. These lots had naturally become gathering places for the children, and directors were sent with balls, bats, bean bags, ropes., etc., to play games with the youngsters. These play stations were at Second and G Streets NE. and at Tenth and K Streets NE. The average daily attendance was about 150.

Good story-telling is considered such an important feature in the education of the child that at certain times, when it is too hot for strenuous sport, a special teacher is employed to go from one playground to another telling stories. These include folk stories, hero stories, and fairy tales of all lands, so used that the child may get the best in literature of every age and nation as well as one example of the beauty of diction in the language of the story-teller. The stories give the child who may be hampered either by lack of books at home or of initiative in reading a literary background and they are of great help in arousing interest in forms of play that stimulate the imagination and encourage dramatics and pageantry. So interested are children in the story hour that it is not unusual to see 40 or 50 gathered around the playground worker.

A playground feature of great constructive worth, carried on in school and city playgrounds, is the industrial work taught by the play leaders. Every child since the beginning of time has wanted to make something in imitation of his elders—mud pies or block houses or railroads or boats of sticks. This imitative instinct in children is taken advantage of, to their great pleasure and profit, by the industrial classes on the playgrounds. In the season which closed in October, 1914, 3,500 children in the city playgrounds and 1,700 in the school playgrounds were taught something of sewing, embroidery, carpentry, gardening, or basket work. School gardens have been started for the boys in the upper grades during the school term at a few schools and they have been open for both boys and girls during vacation. These vacation gardens have depended largely on private contributions and have been limited by lack of funds and of suitable land.

During the summer of 1914 two classes were held on school playgrounds for children retarded in their studies, and 95 per cent of them were promoted on returning to school in the fall.

Facilities for play for young people.—The District playground department has tennis courts or a basket-ball field or both in all its playgrounds. Four of the white playgrounds can arrange for track

athletics by suspending other activities. At 2 playgrounds (Rose-dale and Cardozo) there is a full-sized baseball diamond and soccer football field, but only one of these larger playgrounds lies in a congested section. No other playgrounds but Georgetown and Bloomingdale can give space to older children without sacrificing the needs of those under 14 years of age.

This department supervises baseball and soccer football on 2 fields used by boys only. These are distinct from the 12 regular playgrounds and the 2 "play stations," and are provided with no equipment except a baseball diamond. The fields used in this way during the summer of 1916 were the Federal reservation at Fifth and L Streets SE. and vacant land belonging to the public schools at Seventh and O Streets NW.¹ The fields were well patronized by older boys who played after working hours; but though the largest attendance came after 3 o'clock in the afternoon, the fields were in constant use throughout the day.

Already, with the inadequate facilities at hand, soccer, baseball, tennis, and croquet tournaments have been held. A spring athletic meet has been organized, which has depended on the courtesy of a private association for the use of a field, since no public land is available. That the children enjoy these playground activities is indicated by the number of games played under supervision of the department of playgrounds of the District of Columbia—in 1914, 3,354 basket-ball games, 44 soccer games, 11,347 croquet games, and 147,955 tennis games.

For athletic purposes the public schools have been grouped into eight divisions, each having as a center a municipal playground, where teams representing the schools in baseball and soccer for boys and basket ball for girls play for the playground division championships each year. The winners of the division championships in soccer and baseball compete for the championship of the city. These contests are carefully supervised and high standards of sportsmanship are maintained.

During the summer interplayground leagues are maintained in various branches of sport in which 2,500 growing boys and youths participate. If spaces were provided for them, many thousands more could be reached and would enjoy the benefits of tennis courts, baseball diamonds, and football and basket-ball fields.

Washington had in 1913 in the entire city about 26,000 young people between 15 and 19 years of age, boys and girls who have outgrown playground interests and need space and equipment for tennis, baseball, soccer, football, basket ball, and track athletics. To these must be added children in the seventh and eighth grades whose

¹ The department has had from time to time the use of a private field also for baseball, but it has not attempted to supervise athletics in more than 2 fields at one time.

recreational interests resemble those of the older rather than those of the younger group. In 1914-15 about 14,000 young people were enrolled in the higher grades of the public-school system.¹ At present high-school athletic contests are held on borrowed fields and occasionally the diamonds on the Ellipse are used for high-school ball games. For practice work near their schools the boys are dependent on vacant lots.

An athletic field for high-school students has been opened since 1914 in Georgetown at the Western High School, and a new and more complete athletic center will be opened in connection with the new Central High. There is, however, no large field available at any other high school. The 8 school gymnasiums² do not meet the needs of all the vocational schools and of the grade schools throughout the city.

The spaces controlled by the Office of Public Buildings and Grounds offer a considerable range of opportunity for recreation. Nineteen tennis courts are maintained in Potomac Park and 3 in Montrose Park.³ Permits are issued to individuals upon application and to various religious and business associations and high-school organizations, and the courts are in constant use.

Twelve baseball diamonds are provided—4 on the Ellipse and 8 on the Monument Grounds. It is estimated that 800 persons play on these grounds each month of the season. As in the case of the tennis courts, the number of applicants far exceeds the available accommodations.

There is one 3-hole golf practice course in Potomac Park, with about 25 permits for use outstanding during the season. Two polo fields in Potomac Park provide for about six games per month between May and October, which 13,000 visitors attended in 1916. The one croquet court in Montrose Park is being used to a considerable extent, clubs having been formed for the game. One football ground in Potomac Park and a running track in the Monument Grounds are available for those who are not high-school students, and permission is granted for the use of the open space in Potomac Park during the fall months.⁴ About 200 persons a month avail themselves of this privilege.

¹ In the seventh and eighth grades, high schools, vocational schools, and normal schools of the District the enrollment was 10,851 white students and 3,977 colored students of both sexes. Report of the Board of Education to the Commissioners of the District of Columbia, 1914-15, pp. 50, 51.

² Wilson Normal, Miner Normal, Business High, Central High, Eastern High, Western High, M Street High, Armstrong Manual Training. Two additional gymnasiums have been opened in the new Central High and the Dunbar High School.

³ Summer of 1916: The number of tennis courts under the Office of Public Buildings and Grounds has been increased to 35, including 12 at Henry Park, Sixth and D Streets NW., and 1 at Garfield Park SE. Over 7,000 persons used the courts during the summer of 1916.

⁴ Appropriation has been made for an athletic center with fields of all kinds, a shelter house, and boating facilities in East Potomac Park. It is hoped to connect this with the southwest district by ferry.

When the ice is sufficiently thick for skating on the Tidal Basin, large areas are cleared of snow and supervised to avoid danger.

In all of Washington, with its 75,000 young people 5 to 19 years of age, only 7 public swimming pools are now provided. The new Central High School adds an eighth pool, which, unlike the others, will be available the year round.¹

Three pools are on the Georgetown, Howard, and Rosedale Playgrounds. The 4 pools on the Monument Grounds, popularly known as the Municipal Bathing Beach, are also managed by the District playground department and are open at specified hours for men and boys and for women and girls.

Even more slight has been public provision in Washington for indoor recreation. Since March, 1915, however, the use of public-school buildings as neighborhood centers has been specifically permitted by law. A few school buildings have been widely used by the people in their neighborhoods for various unofficial activities, notably the Grover Cleveland School, the Elizabeth V. Brown School at Chevy Chase, the Wilson Normal School, the Eaton School at Cleveland Park, the Lucretia Mott School, and the Cardozo School. Lectures are given, civic organizations and neighborhood clubs hold meetings, and occasionally there are motion pictures or dancing. But in general it appears that, apart from social organizations among high-school students, the neighborhood activities at the schools have been of interest to parents rather than to young people. The gymnasium at the Wilson Normal is the only one of the school gymnasiums which has been open for special classes outside of school hours. The need of wholesome indoor and evening recreation for young people and adults is not met by the present use of school buildings and their meager provision for dancing, gymnastics, dramatics, and young people's clubs.

VOLUNTARY PROVISION FOR RECREATION.

Various voluntary associations, religious and social groups, Boy Scouts, Girl Scouts, Camp Fire Girls, and Y. M. C. A. and Y. W. C. A. for both colored and white contribute to the recreational activities of the city.² Any endeavor, however, to measure their extent results in

¹ Four indoor swimming pools are open in connection with voluntary organizations.

² The following organizations have been reported as offering facilities for recreation: Alliance House, Carroll Institute, Friendship House, Lindsay House (colored), Neighborhood House, Noel House, Satterlee House (colored), Social Settlement (colored), The Center (colored), Y. M. C. A., Y. M. C. A. (colored), Y. W. C. A., Y. W. C. A. (colored), Y. W. H. A. (since 1914). In addition there are gymnasiums, social entertainments, or opportunities for dancing in halls connected with various churches. Where such uses have been reported for parish halls they are indicated in the intensive studies of health districts.

numerous difficulties. In the first place, these activities are likely to shade off into others having a different motive or purpose. What may be emphasized in one organization as a distinct recreational feature may be far surpassed by an unrecorded activity in another. Attempts to obtain daily attendance figures from several of the most prominent institutions in the city failed absolutely for various reasons—chiefly because no records were kept. A membership of approximately 1,500 young people between 12 and 18 years of age was reported by the Boy Scouts and Camp Fire Girls. (It is estimated by the Boy Scouts officials that there are 25,000 young people of scout age in the city.)

The great outstanding fact in regard to these voluntary organizations is that they afford indisputable testimony to the eagerness of young people to take advantage of every opportunity for innocent amusement. They are attempting to meet from private resources a great demand for play which has a legitimate claim on the resources of the community. However generous the facilities for play which they may provide, they will scarcely meet all the varied needs of a city's population. Great parks for athletics and properly distributed playgrounds for little children, clean swimming pools and well-equipped gymnasiums available for all and free from any suggestion of charitable bounty can be planned and equipped only from the common purse of the community. When ultimately the community provides the adequate equipment for play the social activities of each of these voluntary agencies will afford a valuable nucleus from which there will develop among the young people of the city a wholesome human use of that equipment.

The Young Men's Christian Associations, the Young Women's Christian Associations, the settlements, and other volunteer organizations offer athletic training and social entertainment. Their activities also include social and civic clubs for young people, playgrounds for children, swimming tanks and gymnasiums, and summer camps outside the city.

The Boy Scouts and the Camp Fire Girls in Washington are a part of these nation-wide movements which are endeavoring to popularize outdoor life and to give skill in all sorts of woodcraft. The tests, examinations, and standards of ethics which lead by successive steps from the tenderfoot scout degree to the first-class scout degree are the same here as elsewhere. Washington had, in 1914, 120 first-class scouts, whose average age was 15 years. The "merit badge" system of the Boy Scout organization has drawn out the best efforts of

hundreds of boys who were interested in the various activities for which these badges are given.¹

In all social activities for young people requiring adult leadership, whether Boy Scouts, Girl Scouts, social-settlement clubs, or Y. M. C. A. and Y. W. C. A. work, it has been recently said that the question is not a boy and a girl question, but a man and a woman question—the question of securing adult leadership. The more technical the work of the organization the greater is the difficulty of securing leaders.

It is a truism, therefore, to point out that the development of all sorts of wholesome play is limited not by the lack of eager young persons but by the lack of leaders and of facilities.

COMMERCIAL RECREATION.²

Washington is well supplied with motion-picture and vaudeville shows, dance halls, pool rooms, and bowling alleys. These are all legitimate types of recreation, yet they can be conducted in such a way as to constitute a hazard to young people.

Licenses were issued during the year from November, 1914, to November, 1915, to 81 motion-picture establishments in the District of Columbia, or one for every 4,200 persons. All of these houses are inspected by the fire and building departments.

¹ The following list of subjects and the number of badges awarded in Washington is suggestive as showing the breadth of interest among Washington boys:

Agriculture.....	1	Chemistry.....	5	Horsemanship.....	4	Physical develop-	
Angling.....	1	Civics.....	12	Interpreting.....	2	ment.....	1
Architecture.....	1	Conservation.....	6	Invention.....	3	Pioneering.....	26
Art.....	7	Cooking.....	31	Leather working.....	16	Plumbing.....	9
Astronomy.....	11	Craftsmanship.....	61	Life saving.....	34	Poultry farming.....	11
Athletics.....	11	Cycling.....	31	Machinery.....	13	Printing.....	3
Automobiling.....	3	Dairying.....	1	Marksmanship.....	27	Public health.....	97
Aviation.....	4	Electricity.....	11	Masonry.....	28	Scholarship.....	9
Bee farming.....	8	Firemanship.....	78	Music.....	6	Sculpture.....	1
Blacksmithing.....	8	First aid.....	52	Ornithology.....	1	Seamanship.....	7
Bugling.....	12	First aid to animals..	9	Painting.....	23	Signaling.....	7
Business.....	11	Forestry.....	16	Pathfinding.....	30	Stalking.....	1
Camping.....	24	Gardening.....	18	Personal health.....	97	Surveying.....	5
Carpentry.....	24	Handicraft.....	61	Photography.....	1	Swimming.....	56

These were the figures for 1914. At that time Washington had also 14 eagle scouts, 8 life and star scouts, and 3 honor-medal scouts.

² The saloon offers a different problem which hardly comes within the scope of this discussion, since the excise law, effective November 1, 1914, has separated the saloon from the business of play. "No licensee * * * except in the case of hotels, restaurants, and clubs shall permit the playing of pool or billiards, or any other games whatever, in the room where such liquors are sold or drunk, or in any adjoining or intercommunicating room; nor shall he, except in the case of hotels, restaurants, and clubs, permit the playing of music or theatricals of any kind, or provide other amusements in his place of business or in connection therewith." [37 Stat. L., ch. 150, p. 1003, par. 14 (act of Mar. 4, 1913).] The sale of liquor to any minor is prohibited, and the presence of a minor under 18 in a place where liquors are sold is forbidden by the same law. The location of 294 of the 300 licensed barrooms is shown in the charts, pp. 35 to 59.

Out of 250 films inspected in the course of this study, 99 were comedy scenes or farce, 68 were romantic, 51 showed crimes as main features of the stories, 23 were educational, and 7 were adventures, while 2 could not be classified. Virtue is generally triumphant, and the criminal always meets an unhappy end; but many parents feel that less emphasis should be placed on the criminal incidents. The accurate portrayal of a burglar blowing open a safe may be an object lesson to some impressionable boy with adventurous tendencies. In the old days the dime novel was condemned because it was believed to teach crime, and the cheaper melodrama always had a villain who, before his capture, taught a few tricks of his trade to the aspiring young gangster. These, however, were mere child's play in comparison with the photographic dramas of to-day. In some way parents and children should be assured that the play is clean and proper for them to see.

The figures obtained by a survey of 73 of the motion-picture houses and shown in the appendix¹ give a result which is equivalent to an attendance once a week of every person in Washington. A fairly accurate survey showed that the average daily attendance was 44,088. Counting all under 18 years as minors, it was found (contrary to the usual impression) that adults were far in the lead, with 35,858 a day, the minors showing a daily "movie" strength of 8,230. Of the total, 39,416 were white, 2,740 colored; the remainder were not reported separately. The adult whites numbered 32,242. Under 18 years, the white boys and girls numbered 7,174 and the colored 640.

The schools have tried to encourage the presentation of educational films at the theaters by arranging for groups of children to attend. Good films are also shown occasionally at a few school buildings outside of school hours, and by a few of the volunteer agencies which conduct social activities.

Public dances in Washington are generally organized by a club or other association. During the season 1914-15 the number of public dances averaged about 35 a week, with an average weekly attendance of 5,556 persons. The admission fees amounted to \$1,310 a week, or \$44,202 for the dancing season.

At 14 halls and 4 open-air parks holding annual licenses for the year beginning November 1, 1914, public dances were held more or less regularly. Such an annual license costs \$100 and involves annual inspection of fire escapes and of the building generally. Miscellaneous dances of public or, more frequently, semipublic character are held at irregular intervals in some 50 other halls. These other halls are required by law to take out a special license of \$3 for each dance except when the dance is for a church or some charitable purpose.

¹ Table 4, p. 66.

Perhaps the most significant type of gathering showing the need for inexpensive or free opportunity for orderly social gatherings is what is sometimes known as the "cottage dance," a semipublic affair in a small private house where the participants pay for music and bring refreshments. As an instance of the crowded quarters in which these dances are held, it was noted that at a single typical gathering in a winter evening 50 people were dancing in two small rooms. The value of additional assembly rooms available for neighborhood use as civic and social centers is obvious.

Pool and billiard rooms and bowling alleys play a comparatively small part in the recreation facilities of Washington. Only 177 such places were in operation in 1915, as many went out of business under the new excise law which prohibits their operation in connection with saloons. Of these places, 12 were bowling alleys and 13 were bowling alleys in connection with billiard and pool rooms.

The attendance at pool and billiard rooms was about 43,289 a week. The largest attendance reported at any one place was 6,000 a week, the smallest was 30, and the average, 385. In 81 pool rooms regular patrons were said to attend five times a week. The condition of the rooms was reported as good, and in only 9 was the sanitation poor. The attendance at bowling alleys on the day of inspection was 275. The only two commercial alleys acknowledging attendance of minors claimed 100 boys and 60 boys a week, respectively.

The need of noncommercial bowling alleys and pool tables has been recognized, and a few have been provided by volunteer social centers and the Y. M. C. A.

RECOMMENDATIONS.

In view of the necessity for some concerted action in developing recreation facilities in the District, an ex officio commission has already been formed, as has been seen, of the heads of the three administrative bodies now responsible for public play, namely, the president of the board of education, the president of the District Commissioners, and the officer in charge of public buildings and grounds. Pending a time when a single department may take the centralized responsibility for recreation in the District this report suggests, in addition to this ex officio commission, an advisory committee as the most practicable means for securing a presentation of popular opinion and an intelligent public interest in the balanced development of recreation plans.

It is suggested, therefore, that the ex officio board appoint nine representative citizens, men and women, who shall serve as an unpaid advisory committee and shall report to the ex officio board in the month of May of each year recommendations for the further development and greater effectiveness of recreation facilities.

As an immediate program for increasing the public provision for play, it is recommended that the fullest possible use be made of existing facilities:

1. The school yards now used as summer playgrounds could be used throughout the year for supervised play before and after school on every school day and on other days from 9 a. m. until dark.

2. All other school yards which have play equipment could be opened for play throughout the year and supervision provided; and unequipped school yards of sufficient size to serve as neighborhood playgrounds could be equipped and made similarly available.

3. All park areas within the original city and certain other Federal reservations could be made available for the use of little children with their mothers or caretakers by installing benches in shady spots and such simple equipment as sand piles and wading pools.

4. Certain Federal reservations and other pieces of public land could be opened for play or athletics. For example, complete athletic fields (and a swimming pool) could be provided in Rock Creek Park at the reservoir; a playground could be opened in a part of the new Meridian Park; and equipment for athletics (if properly fenced from the railroad track) on the land around the power plant at Virginia Avenue and South Capitol Street. The public golf links started at Fort de Russey could be completed. Part of the land between Monroe and Newton Streets NE., near Eighteenth Street, which is owned by the board of education, could be developed as a playground for children and an athletic field.

5. The use of school buildings as recreation centers might be further developed.

It is evident, however, that even with the fullest use of existing facilities suitable play space will not be available for all children of all ages within a reasonable distance from their homes. Attention is called in the intensive studies of individual health districts to those neighborhoods where the need of providing additional space is most pressing.

It is urged that in future no new school building be erected without an ample yard for play or athletics. In the development of all outlying districts frequent open spaces should be secured for the use of mothers and little children. The advisory committee should give consideration, in making its annual report, to providing adequate and equitable play facilities throughout the District in keeping with the growth of the city, the shifts of population, and the development of new residential areas.

The present need of athletic fields can hardly be localized in individual health districts. In general it is clear that athletic fields, distinct from younger children's playgrounds, ought to be made

available for adults and young people who are not high-school students and who do not live within easy reach of existing and proposed facilities. But in this case again existing public land will not adequately meet the situation. For example, an athletic field for adults and young people not enrolled in any school is urgently needed in the now closely built sections north of Florida Avenue and east of Eleventh Street where no public land is available.

No athletic field is available at present for colored young people except a baseball diamond on the Monument Grounds. It is most desirable that athletic facilities be provided near the new Dunbar High School, and as there is no suitable piece of public land in that neighborhood land should be purchased for this purpose.

Purchase of the Patterson tract (in health district 30) has been frequently urged as an important addition to the park system of the District. This report concurs in recommending its purchase as affording not only park area but land admirably situated for play retreats, playgrounds, and athletic fields.

Snow Court (in health district 3) is recognized as an insanitary alley which ought to be cleared out. A playground and athletic field in this general neighborhood are greatly needed, and if Snow Court were purchased and made into a complete recreation center a double purpose would be served. Similar treatment of alleys in other neighborhoods where recreation facilities are inadequate might also be considered.

Additional clearing out at the Willow Tree Park Playground is desirable, in order to open a generous space toward the street at one side of the present area.

Additional provision should be made for swimming. Not only should there be more outdoor swimming pools for summer use but indoor swimming should be available for all. A public natatorium could be erected in some central location and an indoor recreation center with gymnasium and swimming pool placed at the Willow Tree Park Playground. In a city in this latitude, with the peculiar heat of Washington, ample provision for public baths and swimming is absolutely necessary to health.

The new recreation center which is to be opened in the eastern part of Potomac Park will give an anchorage for small boats. At other places convenient to the different sections of the city boathouses with nominal charges might be provided. Also, at two suitable places on the water fronts of southwest and southeast Washington small waterside parks with recreation pavilions would be of service. The experience of all cities in the United States has shown that the demand for use of all available water facilities steadily increases.

The need for additional facilities with which this report is primarily concerned unavoidably carries with it the necessity for securing trained persons of high character and special aptitude not only to develop public recreation but to serve as directors on the playgrounds. Courses for training recreation directors are now offered by certain technical schools, and there is a growing interest in the subject among educators. No discussion of the question is here attempted beyond the statement that intelligent, trained, and suitably paid supervision is essential to the public value of the plans submitted.

The new dangers to street play which are created by the universal use of automobiles; the rapid increase in multiple dwellings; and the general growth of the city, which is constantly eliminating vacant lots formerly available for play, emphasize the immediate necessity for public purchase of adequate play areas if the safety and well-being of Washington children are to be assured.

INTENSIVE STUDIES OF HEALTH DISTRICTS.

Charts and statistics give detailed studies of population, density, mortality rate, schools and playgrounds, other public and volunteer recreation facilities, and commercial recreation in 25 of the 53 health districts into which the District of Columbia is divided. On the charts red represents land owned by the Federal Government, and yellow, land owned by the District of Columbia.

Areas are worked from Baist's Surveys of Washington, D. C., 1913.

Population figures for health districts are taken from the annual report of the department of health of the District of Columbia for the year 1914 and are based on the police census of 1913.

Density of health district is reckoned from these population figures and area exclusive of streets. Density of individual blocks is based on block area exclusive of streets and block population reported in the police census of 1913.

The mortality rate is based on the census of 1913 and mortality figures for two successive years, 1913 and 1914.

Number and location of commercial recreation facilities are based on records of the license bureau of the District of Columbia for annual licenses issued for the year beginning November 1, 1914.

The same symbol is used for pool rooms and for bowling alleys, and where licenses for both kinds of establishments are issued for the same address they are shown on the chart by a single symbol and reckoned as one establishment in the enumeration of facilities.

Although theaters, motion-picture establishments, and public dance halls are all licensed under the same two paragraphs of the license

law applying to indoor and outdoor establishments, respectively, the records of the license bureau make the following classifications:

Theaters.

Motion-picture theaters.

Public halls other than motion-picture theaters.

Public parks with motion pictures.

Other public parks.

These are shown in the charts and intensive studies under three headings—theaters, motion pictures (combining indoor and outdoor), and dance halls (both indoor and outdoor). It should be noted that the annual license for a public hall or a public park includes the privilege of maintaining public dances, but only such of these licensed halls and parks as were known to be used for dances are shown with dance-hall symbol.

Amusement places licensed as shooting galleries or as slot-machine establishments are also included in the studies of the districts in which they are found.

Halls taking out occasional \$3 licenses for public dances are not included in the charts and summary of facilities.

The location of each establishment holding a barroom license under the excise law is indicated. The license records are uniform for such licenses whether issued to hotels, restaurants, clubs, or saloons. The same symbol is therefore used for all barroom licenses, and no attempt is made to distinguish among the types of places for which they are issued.

A few of the commercial recreation establishments and barrooms were outside of the chartered districts.

	Chartered.	Not chartered.
Dance halls.....	15	3
Pool rooms or bowling alleys.....	166	11
Motion pictures.....	79	5
Barrooms	294	6

The following general recommendations should be borne in mind in considering the specific recommendations given in the following studies of health districts.

It is recommended that the existing summer playgrounds in school yards be opened throughout the year for supervised play before and after school on every school day and on other days from 9 a. m. until dark.






It is recommended that all other school yards which now have play equipment be opened throughout the year for supervised play, and that all unequipped school yards of sufficient size to serve as neighborhood playgrounds be equipped and made available.

It is recommended that the use of school buildings as recreation centers be further developed.






LEGEND

to accompany charts of
health districts.









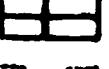
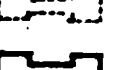

Average density per acre, streets not included

	.....	over 300
	.....	200 - 299
	.....	150 - 199
	.....	75 - 149
	.....	1 - 74




Commercial Recreational Facilities

	.....	Saloons
	.....	Pool Rooms & Bowling Alleys
	.....	Motion Picture Halls & Parks
	.....	Public Dance Halls & Parks
	.....	Theaters
S.M.	.....	Slot Machine Parlors
S.G.	.....	Shooting Galleries

Public Recreational Facilities

	.....	School Buildings
	.....	Municipal Playgrounds, 1914
	.....	Supervised Summer School Playgrounds, 1914
	.....	Equipped School Yards, 1914
	.....	Municipal Playgrounds since 1914
	.....	Supervised Summer School Playgrounds since 1914
	.....	Equipped School Yards since 1914
	.....	Athletic Fields
	.....	Tennis Courts
	.....	Swimming Pools since 1914
	.....	Swimming Pools, 1914

Voluntary Recreational Facilities

	.....	Social Centers
	.....	Social Centers opened since 1914
	.....	Playgrounds

District 1.

HEALTH DISTRICT NO. 1.

Area, exclusive of streets, 178.2 acres.

Location and boundaries:

Northwest. M Street on south, Rock Creek on west, Florida Avenue on north, and Fifteenth Street on east.

Population, 18,140:

White, 11,755—		Colored, 6,385—	
Under 20	2,412	Under 20	1,343
20 and over	9,343	20 and over	5,042

Alley population: White, 35; colored, 226.

Density per acre, 101.7:

Number of blocks with density of—

300 and over	1
200 to 299	1
150 to 199	3

Mortality rate, 12.62:

White	10.64	Street	12.19.
Colored	16.29	Alley	42.14

Schools:

White, 3—		Colored, 3—	
1 without equipped yard.		2 without equipped yards.	
1 with equipped yard.		1 with summer playground. ²	
1 with summer playground. ¹			

Recreation facilities, noncommercial:

Sand piles in Dupont Circle (since 1914).

Commercial recreation:

- 3 pool rooms or bowling alleys.
- 2 motion-picture theaters.
- 4 barrooms.

Recommendations:

For little children's play retreat, the purchase of land in the northeastern part of district 1 or northwestern part of district 5.

In district 1 (or 2), for play retreat and playground, the purchase of land west of Connecticut Avenue.

¹ Since 1914.

² This playground is between Sumner and Magruder Schools.

HEALTH DISTRICT NO. 2.

Area, exclusive of streets, 120.7 acres.

Location and boundaries:

Northwest. Pennsylvania Avenue on south, Rock Creek on west, M Street on north, and Fifteenth Street, Vermont Avenue, and Madison Place on east.

Population, 10,360:

White, 5,925—		Colored, 4,435—	
Under 20-----	1,073	Under 20 -----	1,009
20 and over-----	4,852	20 and over-----	3,426

Alley population: White, 61; colored, 738.

Density per acre, 85.8:

Number of blocks with density of—	
300 and over-----	None.
200 to 299-----	2
150 to 199-----	2

Mortality rate, 13.9:

White -----	10.29	Street -----	13.16
Colored -----	18.71	Alley -----	22.52

Schools:

White, none.		Colored, 2—	
		1 without equipped yard.	
		1 with equipped yard.	

Recreation facilities, noncommercial:

Sand piles in Lafayette Square.
Sand piles in Washington Circle (since 1914).

Commercial recreation:

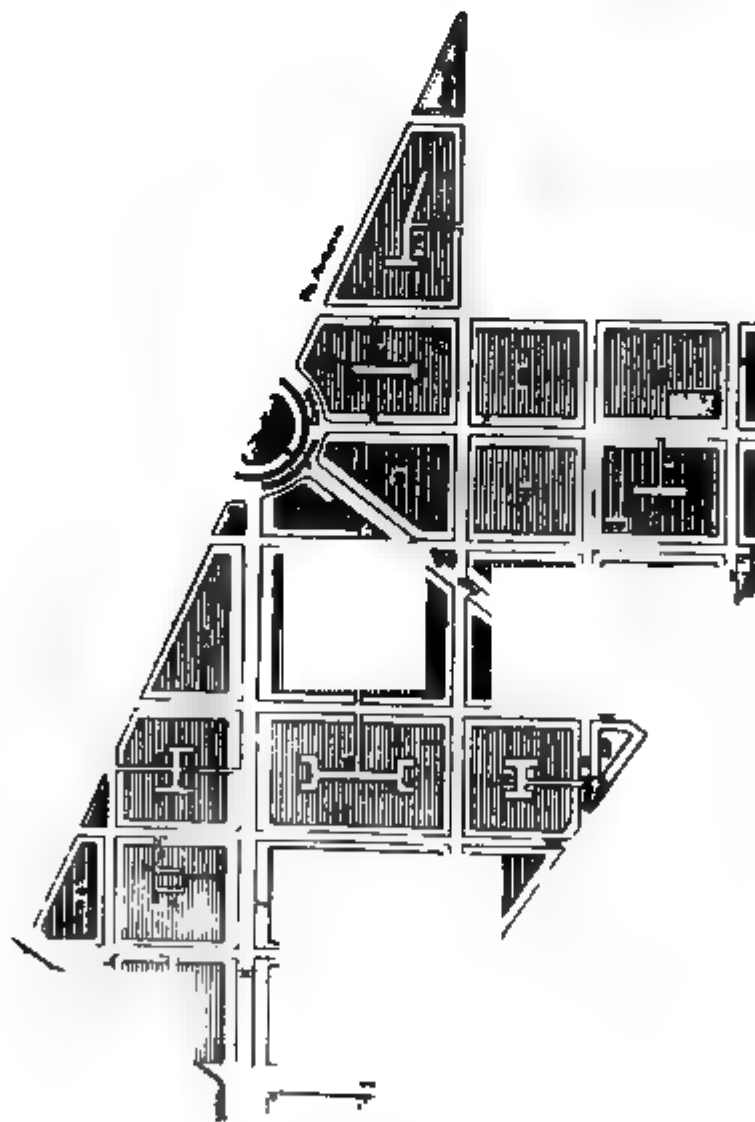
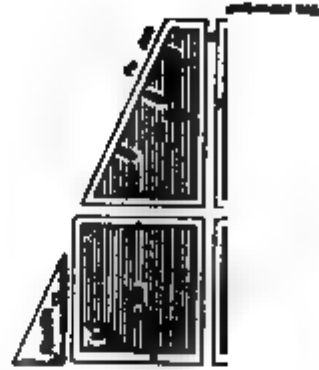
1 dance hall.
1 pool room or bowling alley.
4 motion-picture theaters.
20 barrooms.

Recommendations:

In this district or in district 1, for play retreat and playground, the purchase of land west of Connecticut Avenue.

District 2,

District 3.



HEALTH DISTRICT NO. 3.

Area, exclusive of streets, 102.7 acres.

Location and boundaries:

Northwest. New York Avenue, E Street, and Virginia Avenue on south, Rock Creek on west, Pennsylvania Avenue on north, and Seventeenth Street on east.

Population, 10,292:

White, 6,880—		Colored, 3,412—	
Under 20-----	1,904	Under 20-----	1,024
20 and over-----	4,976	20 and over-----	2,388

Alley population: White, 7; colored, 688.

Density per acre, 100.2:

Number of blocks with density of—

300 and over-----	None.
200 to 299-----	3
150 to 199-----	5

Mortality rate, 19.53:

White -----	18.02	Street -----	19.28
Colored -----	22.56	Alley -----	23.02

Schools:

White, 2—		Colored, 1—	
1 without equipped yard.		1 without equipped yard.	
1 with equipped yard.			

Recreation facilities, noncommercial:

Gallinger Playground, municipal.¹
Y. M. C. A., 1736 G Street.

Commercial recreation:

2 pool rooms or bowling alleys
5 barrooms.

Recommendations:

For playground and athletic field, Snow Court to be purchased and cleared out.

¹ Gallinger Playground has been moved to district 4, which adjoins this district on the south.

HEALTH DISTRICT NO. 4.

Area, exclusive of streets, 78.1 acres.

Location and boundaries:

Northwest. Potomac Park on south, Potomac River and Rock Creek on west, Virginia Avenue, E Street, and New York Avenue on north, and Seventeenth Street on east.

Population, 2,226:

White, 489—		Colored, 1,737—	
Under 20	189	Under 20	603
20 and over	300	20 and over	1,134

Alley population: White, 4; colored, 139.

Density per acre, 28.5:

Number of blocks with density of—

300 and over	None.
200 to 299	None.
150 to 199	None.

Mortality rate, 19.32:

White	10.22	Street	18.72
Colored	21.88	Alley	27.97

Schools:

White, 1—		Colored, 1—	
1 without equipped yard.		1 without equipped yard.	

Recreation facilities, noncommercial:¹

Y. M. C. A. tennis courts, Twentieth and B Streets NW.

In Potomac Park, adjoining the district on the south, are located the bathing pools, managed by the municipal playground department. Under the Office of Public Buildings and Grounds, 19 tennis courts, 4 baseball diamonds, practice golf links, and a polo field are also maintained in Potomac Park.

Commercial recreation:

2 barrooms.

Recommendations:

For athletic center (white), the purchase of land north of Potomac Park accessible to car line.

¹ New Gallinger Playground, municipal, was opened in this district in the spring of 1916, to take the place of the one abandoned in district 3.

District 4.

2

District 5,

HEALTH DISTRICT NO. 5.

Area, exclusive of streets, 177.4 acres.

Location and boundaries:

Northwest. Rhode Island Avenue on south, Fifteenth Street on west, Florida Avenue on north, and Seventh Street on east.

Population, 18,565:

White, 8,064—		Colored, 10,501—	
Under 20	2,012	Under 20	2,562
20 and over	6,052	20 and over	7,939

Alley population: White, 22; colored, 162.

Density per acre, 104.6:

Number of blocks with density of—

300 and over	1
200 to 299	4
150 to 199	12

Mortality rate, 19.66:

White	17.11	Street	19.12
Colored	21.62	Alley	31.88

Schools:

White, 5—		Colored, 4—	
3 without equipped yards.		2 without equipped yards.	
1 with equipped yard.		2 with equipped yards. ¹	
1 with summer playground.			

Recreation facilities, noncommercial:

Colored Y. M. C. A., Twelfth north of S Street.

Playground at St. Paul's Church, Fifteenth and V Streets.

Commercial recreation:

- 2 dance halls.
- 9 pool rooms or bowling alleys.
- 6 motion-picture theaters.
- 1 barrooms.

Recommendations:

For large playground, the purchase of land.

¹ Yard, equipped since 1913-14, is shared by Garnet and Patterson.

HEALTH DISTRICT NO. 6.

Area, exclusive of streets, 144.2 acres.

Location and boundaries:

Northwest. New York Avenue and Pennsylvania Avenue on south, Madison Place, Vermont Avenue, and Fifteenth Street on west, Rhode Island Avenue on north, and Seventh Street on east.

Population, 17,097:

White, 14,067—		Colored, 3,030—	
Under 20-----	2,384	Under 20-----	692
20 and over-----	11,683	20 and over-----	2,338

Alley population: White, none; colored, 419.

Density per acre, 118.5:

Number of blocks with density of—

300 and over-----	1
200 to 299-----	5
150 to 199-----	13

Mortality rate, 15.5:

White -----	14.08	Street -----	14.98
Colored -----	22.11	Alley -----	35.80

Schools:

White, 2—		Colored, none.	
1 without equipped yard.			
1 with equipped yard. ¹			

Recreation facilities, noncommercial:

Sand piles in Franklin Square.

Lindsay House (colored), 1210 Blagden Alley, indoor games for children.

Y. W. C. A., Twelfth and O Streets, tennis courts.

Y. W. H. A., 1330 Tenth Street (since 1914).

Immaculate Conception Hall, 711 N Street, social activities.

Carroll Institute, 916 Tenth Street, social activities for men.

Commercial recreation:

2 dance halls.
11 Pool rooms or bowling
alleys.
2 motion-picture theaters.

Commercial recreation—Contd.

1 theater.
1 shooting gallery.
19 barrooms.

Recommendations:

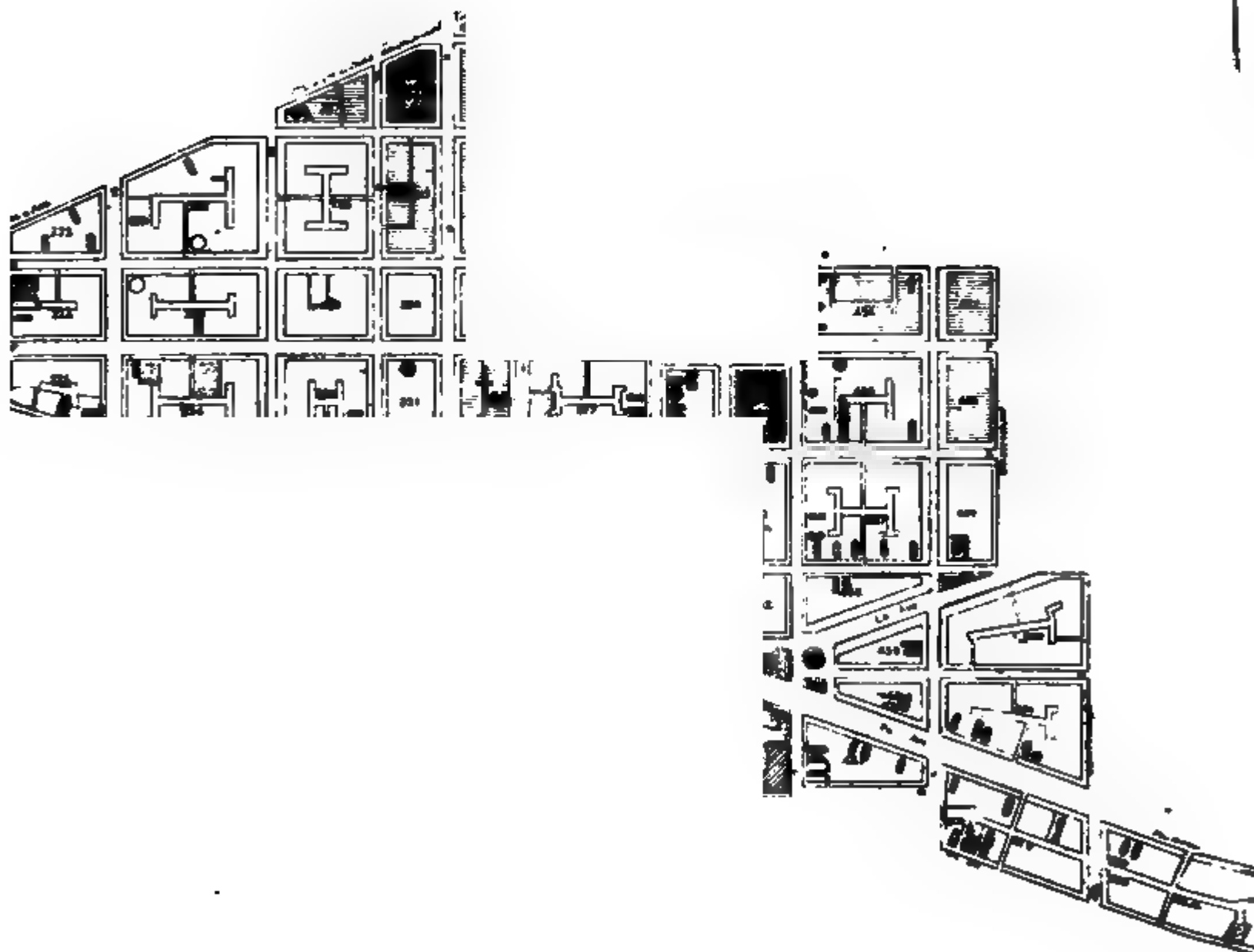
For large playground, including suitable space for little children, the purchase of additional land near Strong John Thomson School.

¹ The Strong John Thomson School has two buildings.

District 6,

1
2
3
4

District 7.



HEALTH DISTRICT NO. 7.

Area, exclusive of streets, 140.9 acres.

Location and boundaries:

Northwest. Missouri Avenue (between Third and Sixth Streets) and B Street on south, Fifteenth Street on west, New York Avenue on north, Seventh Street between New York Avenue and G Street, Fifth Street between G and D Streets, John Marshall Place between D street and Pennsylvania Avenue, and Third Street between Pennsylvania and Missouri Avenues on east.

Population, 8,245:

White, 7,593—		Colored, 652—	
Under 20-----	1,083	Under 20-----	103
20 and over-----	6,510	20 and over-----	549

Alley population: White, 27; colored, 82.

Density per acre, 58.5:

Number of blocks with density of—

300 and over-----	None.
200 to 299-----	1
150 to 199-----	None.

Mortality rate, 21.47:

White -----	19.62	Street -----	21.50
Colored -----	42.94	Alley -----	18.34

Schools:

White, 1—	Colored, none.
1 without equipped yard.	

Recreation facilities, noncommercial:

Y. W. C. A., Fourteenth and G Streets.

Epiphany Parish Hall, 1317 G Street, social activities.

Carroll Hall, G and 10th Streets, social activities.

Immediately south of this district in Henry Park are 12 tennis courts, Federal.

Commercial recreation:

3 dance halls.
50 pool rooms or bowling
alleys.
19 motion-picture theaters.

Commercial recreation—Contd.

8 theaters.
1 shooting gallery.
1 licensed slot machine.
106 barrooms.

Recommendations:

For a natatorium, the purchase of land in a central location.

HEALTH DISTRICT NO. 8.

Area, exclusive of streets, 156.4 acres.

Location and boundaries:

Southwest. P Street between Four - and - a - half and Water Streets, and Washington Harbor on south, Washington Harbor and Fifteenth Street on west, B Street between Fifteenth and Sixth Streets and Maine Avenue on north, and Four-and-a-half Street on east.

Population, 15,570:

White, 13,305—		Colored, 2,265—	
Under 20-----	4,578	Under 20-----	676
20 and over-----	8,727	20 and over-----	1,589

Alley population: White, 128; colored, 883.

Density per acre, 99.5:

Number of blocks with density of—

300 and over-----	None.
200 to 299 -----	4
150 to 199 -----	6

Mortality rate, 17.08:

White -----	14.21	Street -----	16.26
Colored -----	33.99	Alley -----	29.67

Schools:

White, 7—		Colored, 2—	
5 without equipped yards.		2 without equipped yards.	
1 with equipped yard.			
1 with summer playground.			

Recreation facilities, noncommercial:

Summer playground, municipal, at Neighborhood House.¹
 Neighborhood House, 470 N Street.
 Epiphany Chapel, 230 Twelfth Street, social activities.
 Grace Parish Hall, Ninth and D Streets, social activities.

Commercial recreation:

11 pool rooms or bowling alleys.
 3 motion-picture theaters.
 22 barrooms.

Recommendations:

For little children's play retreat, the purchase of one plot of land.

¹ Discontinued as municipal playground, 1915.

District 8.





• **RECAP**

HEALTH DISTRICT NO. 9.

Area, exclusive of streets, 196.5 acres.

Location and boundaries:

Northwest. K Street on south, Seventh Street on west, Florida Avenue on north, and North Capitol Street on east.

Population, 22,108:

White, 11,014—		Colored, 11,094—	
Under 20	3,401	Under 20	3,222
20 and over	7,613	20 and over	7,872
Alley population: White, 42; colored, 2,008.			

Density per acre, 112.5:

Number of blocks with density of—

300 and over	1
200 to 299	7
150 to 199	11

Mortality rate, 20.76:

White	14.89	Street	18.89
Colored	26.59	Alley	39.02

Schools:

White, 8—		Colored, 11—	
4 without equipped yards.		8 without equipped yards. ³	
3 with equipped yards. ¹		2 with equipped yards. ¹	
1 with summer playground. ²		1 with summer playground. ⁴	

Recreation facilities, noncommercial:

New York Avenue Playground, municipal.

Satterlee House (colored), 1711½ Glicks Alley.

Commercial recreation:

1 dance hall.
19 pool rooms or bowling alleys.
6 motion-picture theaters.

Commercial recreation—Contd.

1 theater.
1 shooting gallery.
1 licensed slot machine.
18 barrooms.

Recommendations:

For athletic field, the purchase of land near Dunbar High School.

For little children's play retreats, the purchase of 2 plots of land.

¹ One equipped since 1914.

² On block with Polk, Henry, and old Central High; also, summer 1916, field games on one corner of same block under District supervision.

³ One since 1914.

⁴ Between Slater and Langston.

HEALTH DISTRICT NO. 10.

Area, exclusive of streets, 115.5 acres.

Location and boundaries:

Northwest. B Street between North Capitol and First Streets, Pennsylvania Avenue between First Street and John Marshall Place, D Street between John Marshall Place and Fifth Street, and G Street between Fifth and Seventh Streets on the south, John Marshall Place, Fifth and Seventh Streets on the west, K Street on the north, North Capitol Street on the east.

Population, 15,693:

White, 12,046—		Colored, 3,647—	
Under 20	2,722	Under 20	909
20 and over	9,324	20 and over	2,738

Alley population: White, 207; colored, 808.

Density per acre, 135.8:

Number of blocks with density of—

300 and over	None.
200 to 299	6
150 to 199	12

Mortality rate, 18.35:

White	15.86	Street	17.92
Colored	26.60	Alley	24.63

Schools:

White, 4—		Colored, none.	
2	without equipped yards.		
1	with equipped yard.		
1	with summer playground.		

Recreation facilities, noncommercial:

Gonzaga Hall, I near North Capitol Street, social activities.
Sand piles in Judiciary Square (since 1914).

Commercial recreation:

14 pool rooms or bowling alleys.
2 motion-picture theaters.
22 barrooms.

Recommendations:

For large playground, the purchase of land, preferably clearing out some crowded alley.

For sand piles, the purchase of one plot of land.

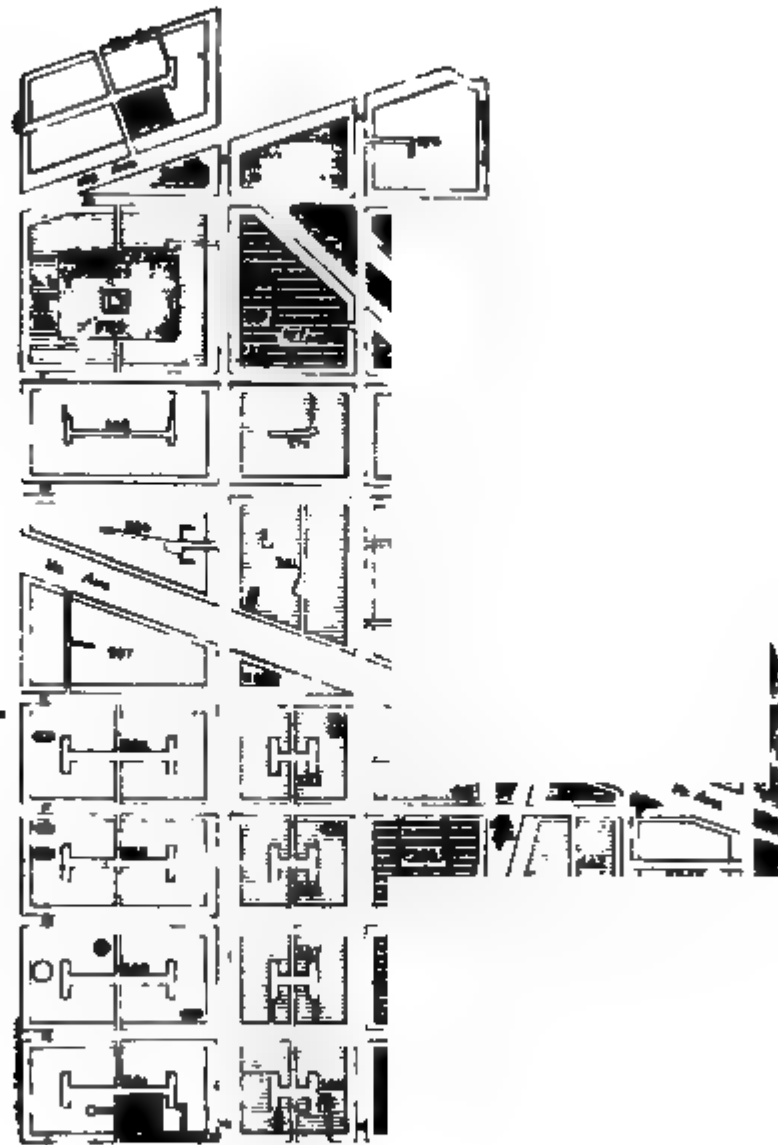
District 10,

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District 11.



HEALTH DISTRICT NO. 11.

Area, exclusive of streets, 72.5 acres.

Location and boundaries:

Southwest. I Street on south, Four-and-a-half Street on west, Maine Avenue, Maryland Avenue, and B Street on north, and South Capitol Street on east.

Population, 8,189:

White, 1,578—		Colored, 6,611—	
Under 20-----	617	Under 20-----	1,903
20 and over-----	961	20 and over-----	4,708

Alley population: White, 91; colored, 884.

Density per acre, 112.9:

Number of blocks with density of—

300 and over-----	None
200 to 299-----	2
150 to 199-----	5

Mortality rate, 21.86:

White -----	12.67	Street -----	21.62
Colored -----	24.05	Alley -----	23.58

Schools:

White, 1—		Colored, 3—	
1 without equipped yard.		2 without equipped yards. ¹	
		1 with equipped yard.	

Recreation facilities, noncommercial:

Willow Tree Park Playground (colored), municipal.

Cardozo Playground (colored), municipal.

Alliance House, 728 Four-and-a-half Street.

Commercial recreation:

1 dance hall.

4 pool rooms or bowling alleys.

2 motion-picture theaters.

8 barrooms.

Recommendations:

For playground, the purchase of additional land opening Willow Tree Park Playground to street.

¹ Cardozo School (shown on the chart with two buildings) has had certain outdoor play equipment which is now a part of the municipal playground on the block with Cardozo School.

HEALTH DISTRICT NO. 12

Area, exclusive of streets, 134 acres.

Location and boundaries:

Southwest. Eastern Branch on south, Four-and-a-half Street on west, I Street on north, and South Capitol Street on east.

Population, 6,587:

White, 2,753—		Colored, 3,834—	
Under 20-----	824	Under 20-----	1,307
20 and over-----	1,929	20 and over-----	2,527

Alley population: White, 1; colored, 392.

Density per acre, 49.1:

Number of blocks with density of—

300 and over-----	1
200 to 299-----	1
150 to 199-----	2

Mortality rate, 23.53:

White -----	15.25	Street -----	23.73
Colored -----	29.47	Alley -----	20.35

Schools:

White, 1—		Colored, 1—
1 with summer play-ground.		1 without equipped yard.

Recreation facilities, noncommercial:

Colored Social Settlement, 18 L Street, includes tennis court.

Commercial recreation:

2 pool rooms or bowling alleys.

1 motion-picture theater.

1 licensed slot machine.

3 barrooms.

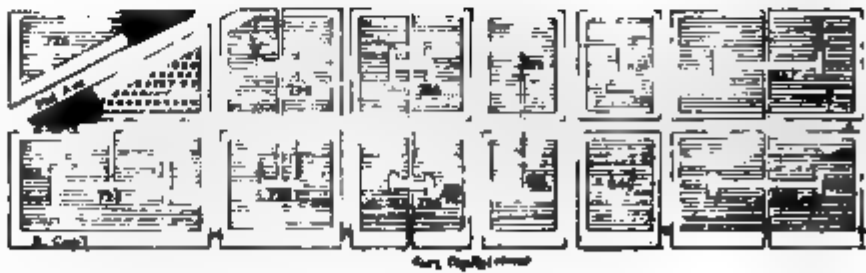
District 12.

Map attached

Map attached

This district extends to the shore south of V Street.

District 14,



HEALTH DISTRICT NO. 14.

Area, exclusive of streets, 191 acres.

Location and boundaries:

Northeast. East Capitol Street on south, North Capitol Street on west, K Street on north, and Seventh Street on east.

Population, 16,792:

White, 14,503—		Colored, 2,289—	
Under 20-----	4,587	Under 20-----	738
20 and over-----	9,916	20 and over-----	1,551

Alley population: White, 238; colored, 495.

Density per acre, 87.9:

Number of blocks with density of—

300 and over-----	None.
200 to 299-----	4
150 to 199-----	7

Mortality rate, 17.33:

White -----	15.38	Street:-----	17.37
Colored-----	30.14	Alley-----	16.38

Schools:

White, 6—		Colored, 1—	
5 without equipped yards.		1 without equipped yard.	
1 with summer playground.			

Recreation facilities, noncommercial:

St. Joseph's Parish Hall, C and Second Streets, social activities.
Sand piles in Stanton Square (since 1914).

Commercial recreation:

7 pool rooms or bowling alleys.
6 motion-picture theaters.
14 barrooms.

Recommendations:

For large playground, including suitable space for little children, the purchase of land.

The recommended purchase of the Patterson tract in district 30 for an athletic center and playground would be of benefit to district 13 and to the northern part of district 14.

HEALTH DISTRICT NO. 15.

Area, exclusive of streets, 120.3 acres.

Location and boundaries:

Southeast. I Street on south, South Capitol Street on west, East Capitol Street on north, Seventh Street on east.

Population, 13,022:

White, 10,607—	Colored, 2,415—
Under 20----- 2,726	Under 20----- 785
20 and over----- 7,881	20 and over----- 1,630

Alley population: White, 2; colored, 484.

Density per acre, 108.2:

Number of blocks with density of—

300 and over-----	None.
200 to 299-----	3
150 to 199-----	5

Mortality rate, 16.12:

White ----- 14.71	Street ----- 16.39
Colored ----- 22.36	Alley ----- 34.98

Schools:

White, 5—	Colored, 2—
4 without equipped yards.	1 without equipped yard.
1 with equipped yard. ¹	1 with summer playground.

Recreation facilities, noncommercial:

Friendship House, 324 Virginia Avenue.

Garfield Park Playground, municipal.²

1 tennis court in Garfield Park, Federal.²

Commercial recreation:

1 dance hall.

2 pool rooms or bowling alleys.

2 motion-picture theaters.

7 barrooms.

Recommendations:

Use of public land around power plant at Virginia Avenue and South Capitol Street for athletics.

¹ Since 1914.

² Federal Reservation No. 17.

District 15,

Eye 2000000

District 16.

EASTERN BRANCH



HEALTH DISTRICT NO. 16.

Area, exclusive of streets, 106.4 acres. .

Location and boundaries:

Southeast. Eastern Branch on south, South Capitol Street on west, I Street on north, and Fourteenth Street on east.

Population, 8,633:

White, 6,019—		Colored, 2,614—	
Under 20 -----	2,145	Under 20 -----	907
20 and over -----	3,874	20 and over -----	1,707

Alley population: White, 61; colored, 107.

Density per acre, 81.1:

Number of blocks with density of—	
300 and over -----	1
200 to 299 -----	3
150 to 199 -----	3

Mortality rate, 15.64:

White -----	11. 29	Street -----	15. 00
Colored -----	25. 63	Alley -----	47. 62

Schools:

White, 1—	Colored, 1—
1 with equipped yard.	1 without equipped yard.

Recreation facilities, noncommercial:

**Sand piles in Federal Reservation at Sixth and K Streets SE.
Baseball in same reservation, under municipal supervision.¹
Virginia Avenue Playground, municipal.**

Commercial recreation:

- 1 dance hall.**
- 3 pool rooms or bowling alleys.**
- 1 barroom.**

¹ Appropriation 1916-17 provides for equipment for various athletic activities.
74282°—17—4

HEALTH DISTRICT NO. 17.

Area, exclusive of streets, 159.5 acres.

Location and boundaries:

Northeast. East Capitol Street on south, Seventh Street on west, K Street and Florida Avenue on north, and Fourteenth Street on east.

Population, 16,121:

White, 13,718—

Under 20----- 4,810

20 and over----- 8,908

Colored, 2,403—

Under 20----- 843

20 and over----- 1,560

Alley population: White, 5; colored, 227.

Density per acre, 101:

Number of blocks with density of—

300 and over----- 1

200 to 299 ----- 2

150 to 199 ----- 8

Mortality rate, 13.46:

White ----- 12.39

Colored ----- 19.56

Street ----- 13.34

Alley ----- 21.55

Schools:

White, 9—

7 without equipped
yards.

2 with equipped yards.

Colored, 1—

1 with equipped yard.

Recreation facilities, noncommercial:

Ingram Memorial Church, Massachusetts Avenue and Tenth Street, social activities, including swimming. (See also district 18.)

Commercial recreation:

1 dance hall.

5 pool rooms or bowling alleys.

6 motion-picture theaters.

1 shooting gallery.

7 barrooms.

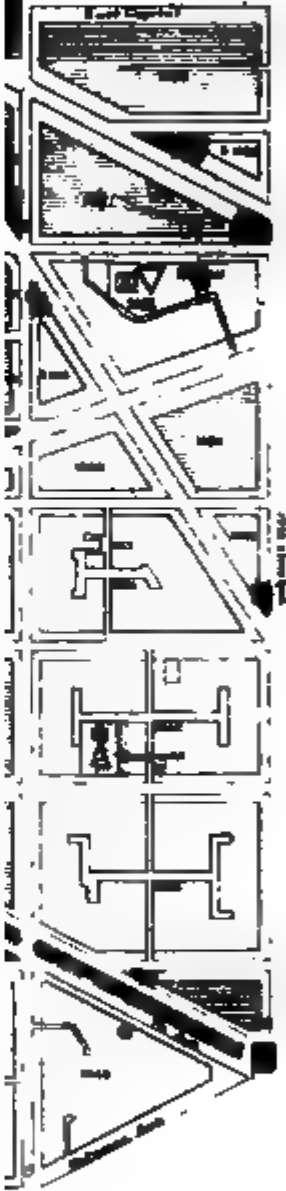
Recommendations:

For little children's play retreats, the purchase of 2 plots of land.

District 17.

Recreation

District 18.



HEALTH DISTRICT NO. 18.

Area, exclusive of streets, 139.9 acres.

Location and boundaries:

Southeast. Potomac Avenue and I Street on south, Seventh Street on west, East Capitol Street on north, and Fourteenth Street on east.

Population, 11,570:

White, 10,061—		Colored, 1,509—	
Under 20-----	3,280	Under 20-----	576
20 and over-----	6,781	20 and over-----	933

Alley population: White, 2; colored, 343.

Density per acre, 82.7.

Number of blocks with density of—

300 and over-----	1
200 to 299-----	4
150 to 199-----	6

Mortality rate, 12.27:

White-----	10.20	Street-----	11.67
Colored-----	25.84	Alley-----	31.88

Schools:

White, 7—		Colored, none.	
4 without equipped yards.			
1 with equipped yard.			
2 with summer playgrounds. ¹			

Recreation facilities, noncommercial:

Tennis courts of Ingram Memorial Church, Twelfth Street south of East Capitol Street.

Commercial recreation:

- 1 dance hall.
- 4 pool rooms or bowling alleys.
- 6 motion-picture theaters.
- 2 barrooms.

¹ One since 1914.

HEALTH DISTRICT NO. 19.

Area, exclusive of streets, 70.6 acres.

Location and boundaries:

Northeast. East Capitol Street on south, Fourteenth Street on West, Benning Road on north, and Eastern Branch on east.

Population, 4,385:

White, 3,362—		Colored, 1,023—	
Under 20-----	1,391	Under 20-----	445
20 and over-----	1,971	20 and over-----	578

Alley population: White, none; colored, 21.

Density per acre, 62.1:

Number of blocks with density of—

300 and over-----	1
200 to 299-----	None.
150 to 199-----	None.

Mortality rate, 15.73:

White-----	10.23	Street-----	15.58
Colored-----	26.39	Alley-----	(¹)

Schools:

White, 2—		Colored, none.
1 without equipped yard.		
1 with equipped yard.		

Recreation facilities, noncommercial:

Rosedale Playground, municipal.
Noel House, 1661 Kraemer Street.

Commercial recreation:

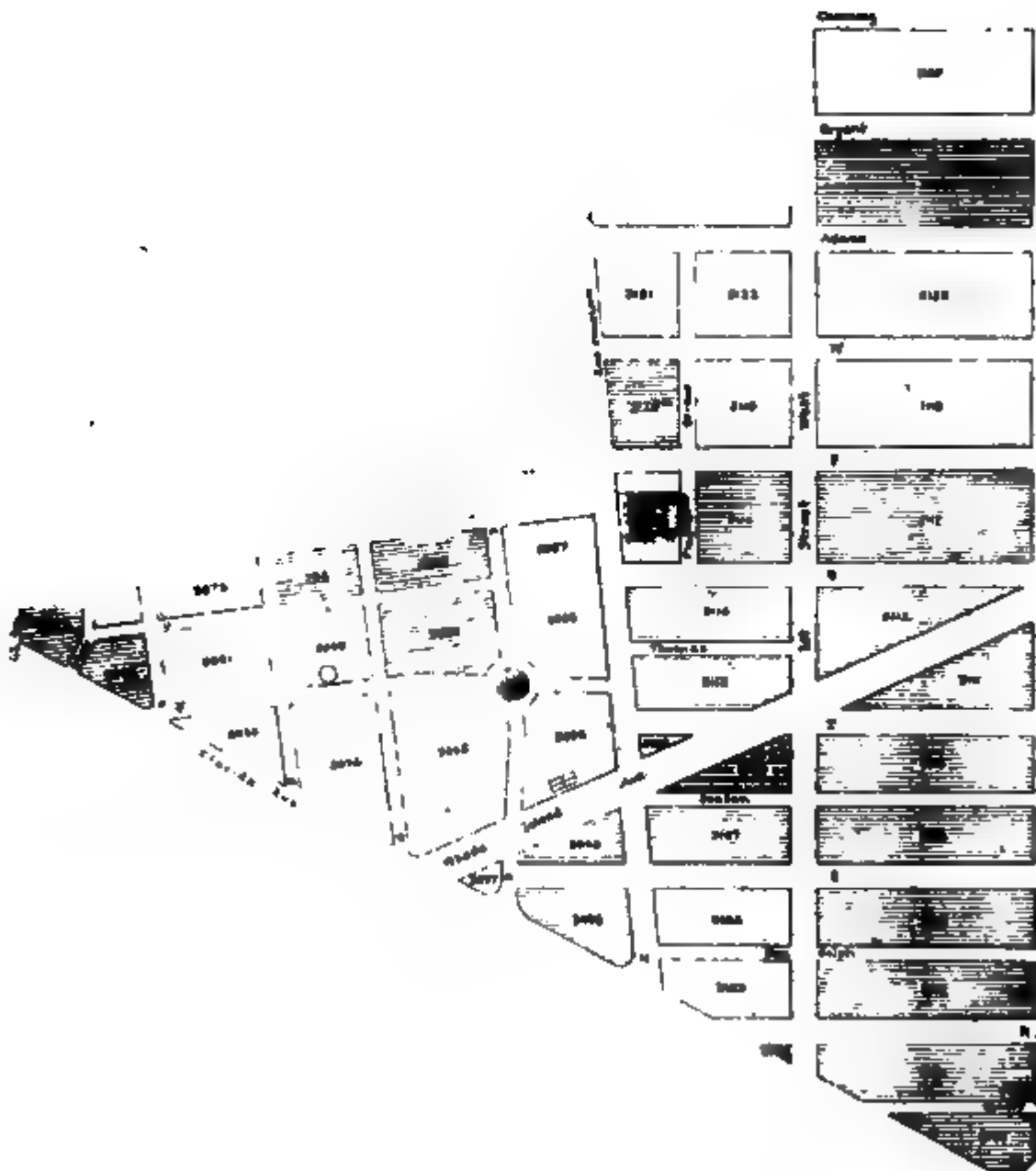
1 pool room or bowling alley.
3 barrooms.

¹ Rate not shown when base is less than 100.

District 19.



District 33.



HEALTH DISTRICT NO. 33.

Area, exclusive of streets, 144.5 acres.

Location and boundaries:

Northwest. Florida Avenue on south, Seventh Street, Florida Avenue to Elm Street, Second Street to Michigan Avenue on west, Michigan Avenue on north, North Capitol Street on east.

Population, 8,549:

White, 6,978—		Colored, 1,571—	
Under 20.....	2,009	Under 20.....	433
20 and over.....	4,969	20 and over.....	1,138

Density per acre, 59.1:

Number of blocks with density of—

300 and over.....	None.
200 to 299	None.
150 to 199	1

Mortality rate, 11.93:

White	10.32
Colored.....	19.10

Schools:

White, 1—		Colored, none.	
1 without equipped			
yard.			

Recreation facilities, noncommercial:

Bethany Baptist Church, 215 Rhode Island Avenue, tennis courts.

Bloomingtondale Playground, municipal.

Y. W. C. A. (colored), 429 T Street NW.

Commercial recreation:

2 poolrooms or bowling alleys.

2 motion-picture theaters.

Recommendations:

For little children's play retreat, the purchase of land south of Rhode Island Avenue or in the western part of district 31.

HEALTH DISTRICT NO. 34.

Area, exclusive of streets, 90 acres.

Location and boundaries:

Northwest. Elm Street on south, Georgia Avenue on west, Columbia Road on north, Second Street on east.

Population, 3,214:

White, 801—		Colored, 2,413—	
Under 20----	299	Under 20-----	878
20 and over--	502	20 and over-----	1,535

Alley population: White, none; colored, 198.

Density per acre, 35.7:

Number of blocks with density of—

300 and over-----	None.
200 to 299-----	None.
150 to 199-----	None.

Mortality rate, 37.33:

White -----	12.48	Street -----	38.13
Colored -----	45.59	Alley -----	25.25

Schools:

White, none.	Colored, 2—
	2 with equipped yards. ¹

Recreation facilities, noncommercial:

Howard Playground (colored), municipal.

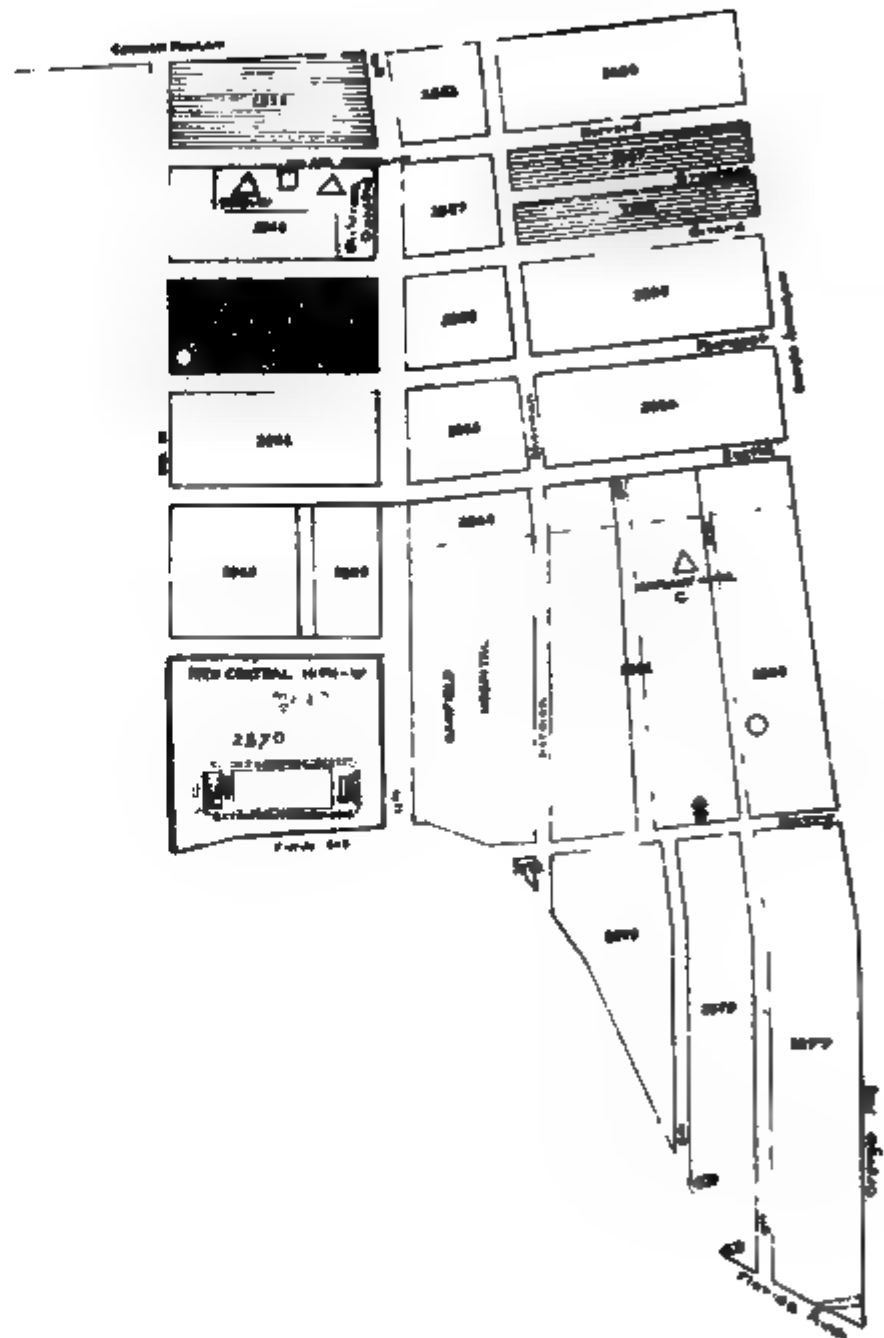
Commercial recreation:

1 pool room or bowling alley.

¹ One since 1914.

District 34.

District 35.



HEALTH DISTRICT NO. 35.

Area, exclusive of streets, 179.8 acres.

Location and boundaries:

Northwest. Florida Avenue on south, Sixteenth Street on west,
Columbia Road on north, Georgia Avenue on east.

Population, 11,669:

White, 8,894—		Colored, 2,775—	
Under 20-----	2,214	Under 20-----	911
20 and over-----	6,680	20 and over-----	1,864

Alley population: White, none; colored, 22.

Density per acre, 64.8:

Number of blocks with density of—

300 and over-----	None.
200 to 299-----	1
150 to 199-----	None.

Mortality rate, 14.57:

White -----	10.79	Street -----	14.51
Colored -----	26.67	Alley -----	(¹)

Schools:

White, 3—		Colored, 1—	
1 without equipped yard. ²		1 without equipped yard.	
1 with equipped yard.			
1 with athletic field. ²			

Recreation facilities, noncommercial:

The Center (colored), 2309 Eighth Street.
Fourth Presbyterian Church, Fairmont and Thirteenth Streets,
social activities.
Mount Pleasant Congregational Church, Columbia Road near
Fourteenth Street, social activities.

Commercial recreation:

1 dance hall.
3 pool rooms or bowling alleys.

Recommendations:

For little children's play retreat, the purchase of land east of
Eleventh Street.
Use of part of Meridian Park as a playground.

¹ Rate not shown when base is less than 100.
² Since 1914.

HEALTH DISTRICT NO. 36.

Area, exclusive of streets, 269.4 acres.

Location and boundaries:

Northwest. Columbia Road on south, Sixteenth Street on west,
Spring Road on north, Soldiers' Home on east.

Population, 13,848:

White, 12,352—		Colored, 1,496—	
Under 20-----	3,586	Under 20-----	506
20 and over-----	8,766	20 and over-----	990

Density per acre, 51.4:

Number of blocks with density of—

300 and over-----	None.
200 to 299 -----	None.
150 to 199 -----	None.

Mortality rate, 10.54:

White-----	9.39
Colored-----	20.05

Schools:

White, 5—		Colored, 1—	
3 without equipped yards.		1 with equipped yard.	
2 with summer play- grounds. ¹			

Recreation facilities, noncommercial:

Mount Pleasant Playground, municipal.

Calvary Church, Columbia Road between Fourteenth and Fif-
teenth Streets, social activities.

Commercial recreation:

4 pool rooms or bowling alleys.

6 motion-picture theaters.

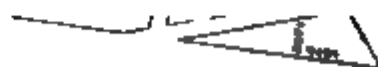
Recommendations:

For athletic center, the purchase of land near Georgia Avenue.

For large playground, the purchase of land, including suitable
space for sand pile, west of Eleventh Street.

¹ One since 1914.

District 36.



District 48.

1

HEALTH DISTRICT NO. 48.

Area, exclusive of streets, 217.6 acres.

Location and boundaries:

Northwest. M Street on south, Wisconsin Avenue on west, Massachusetts Avenue and Rock Creek on northeast.

Population, 7,362:

White, 5,000—		Colored, 2,362—	
Under 20-----	1,565	Under 20-----	736
20 and over-----	3,435	20 and over-----	1,626
Alley population: White, 5; colored, 141.			

Density per acre, 33.8:

Number of blocks with density of—

300 and over-----	None.
200 to 299-----	None.
150 to 199-----	1

Mortality rate, 15.48:

White-----	15.40	Street-----	15.66
Colored-----	15.66	Alley-----	6.85

Schools:

White, 3—		Colored, 1—	
1 without equipped yard.		1 with summer playground.	
2 with equipped yards. ¹			

Recreation facilities, noncommercial:

3 tennis courts and a croquet field in Montrose Park, Federal.

Commercial recreation:

3 pool rooms or bowling alleys.
2 motion-picture theaters.
4 barrooms.

Recommendations:

For little children's play retreat, the purchase of land in the eastern part.

¹ One since 1914. The school with yard equipped before 1914 is outside the area covered by the chart.

HEALTH DISTRICT NO. 49.

Area, exclusive of streets, 51.4 acres.

Location and boundaries:

Northwest. Potomac River on south, Thirty-seventh Street on west, M Street on north, Rock Creek on east.

Population, 1,841:

White, 1,292—		Colored, 549—	
Under 20-----	556	Under 20-----	184
20 and over-----	736	20 and over-----	365

Alley population: White, 56; colored, 51.

Density per acre, 35.8:

Number of blocks with density of—

300 and over-----	None.
200 to 299-----	None.
150 to 199-----	None.

Mortality rate, 27.16:

White -----	18.57	Street -----	23.06
Colored -----	47.36	Alley -----	93.47

Schools: None.

Recreation facilities, noncommercial:

Peck Memorial, M Street near Pennsylvania Avenue, social activities.

Grace Church, Wisconsin Avenue and South Street, social activities.

Commercial recreation:

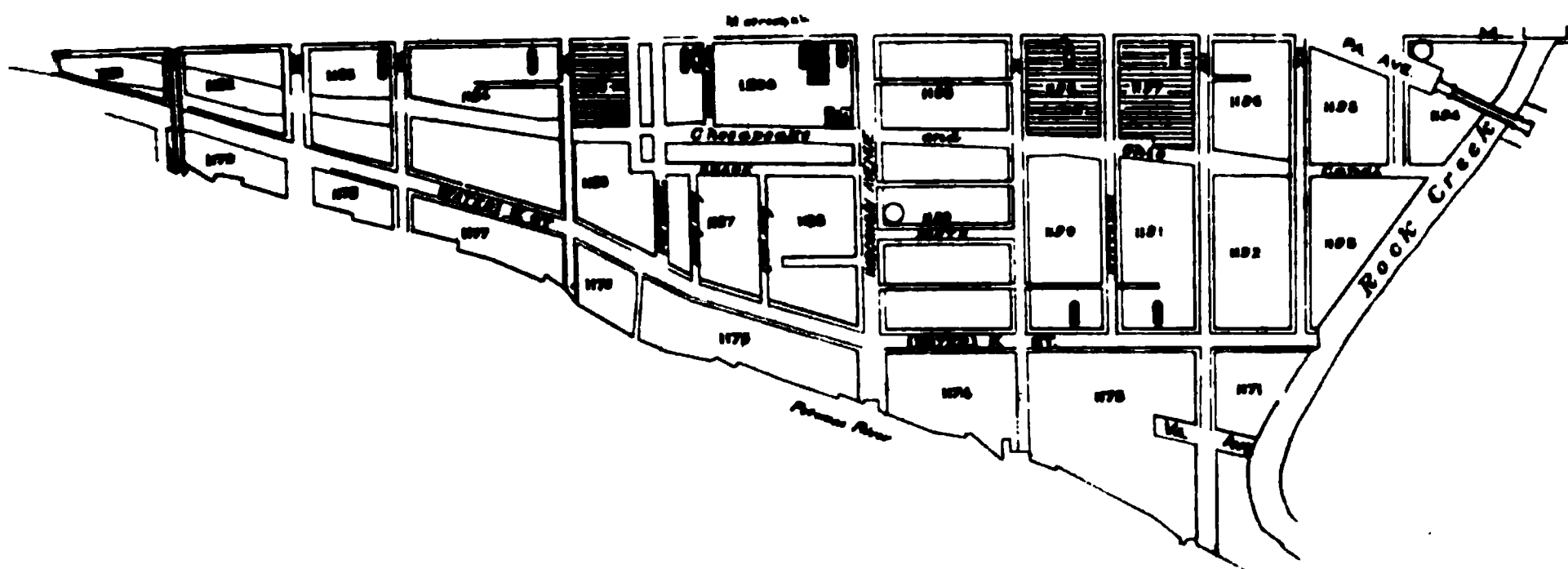
3 pool rooms or bowling alleys.

7 barrooms.

Recommendations:

For large playground (colored), the clearing out of a crowded alley such as Cissel Court.

District 49



District 50

HEALTH DISTRICT NO. 50.

Area, exclusive of streets, 496.9 acres.

Location and boundaries:

Northwest. M Street and Conduit Road on south, Fox Hall and Ridge Roads on west, Tunlaw Road on north, Wisconsin Avenue on east.

Population, 7,574:

White, 6,414—		Colored, 1,160—	
Under 20-----	2,315	Under 20-----	420
20 and over-----	4,099	20 and over-----	740

Alley population: White, none; colored, 98.

Density per acre, 15.2:

Number of blocks with density of—

300 and over-----	None.
200 to 299-----	None.
150 to 199-----	None.

Mortality rate, 18.22:

White-----	15.43	Street-----	17.79
Colored-----	33.62	Alley-----	(¹)

Schools:

White, 8—		Colored, 1—	
5 without equipped yards.		1 without equipped yard.	
2 with equipped yards. ²			
1 with athletic field.			

Recreation facilities, noncommercial:

Georgetown Playground, municipal.

Bruen Home Playground, municipal (discontinued since 1914).

Commercial recreation:

2 pool rooms or bowling alleys.

2 motion-picture theaters.

1 shooting gallery.

9 barrooms.

Recommendations:

For little children's play retreat, the purchase of one plot of land.

¹ Rate not shown when base is less than 100.

² One of these yards is in block with Addlson, Curtis, and Hyde Schools.

SUMMARY.

Administration.—The Federal Government through the Chief of Engineers of the United States Army, the District government through its department of playgrounds, and the District board of education each provides certain public recreation facilities in Washington.

An ex officio recreation commission, consisting of the officer in charge of public buildings and grounds, the president of the District Commissioners, and the president of the board of education, affords opportunity for consultation and cooperation among these three branches of the Government.

The Federal Government provides athletic facilities primarily intended for adults, and benches for mothers and a few sand boxes for babies.

The District department of playgrounds provides supervised playgrounds, during 10 months of the year, especially adapted for children of grade-school age.

The board of education provides play equipment in school yards. During six weeks in summer certain of these yards are used also for supervised play. These are supported by voluntary contributions but directed by the school authorities.

Existing facilities.—Sand piles are maintained in seven open squares for little children. Each of the 12 District playgrounds and 20 school summer playgrounds also includes some provision for the older children of this group. These 39 sites do not, however, bring a play space for little children within one-quarter of a mile of every home in the closely built sections of the city.

During six weeks in summer the District playground department and the school authorities between them conduct 24 supervised playgrounds for white children and 8 supervised playgrounds for colored children. These are adapted primarily to the needs of children 7 to 14 years of age, of whom there are about 30,000 white and 12,000 colored in the District of Columbia. Fourteen of the playgrounds for white children and 5 of the playgrounds for colored children are within the limits of the original city (health districts 1 to 20) and must serve about 16,000 white children and 8,500 colored children 7 to 14 years of age who live in these districts.

Throughout the school year the school yards (of which 66 are furnished with play equipment) are used during recess, but no provision is made for supervised play after school or on Saturdays. Many school buildings are in use, however, which have small yards and at which outdoor play during recess is possible only in the street.

It should be noted that street play is forbidden by law. During two winter months the use of school yards during recess is the only provision for public outdoor recreation.

During the remainder of the year the supervised playgrounds under the playground department of the District government (12 in all—9 for white and 3 for colored) are open on every week day from 9 a. m. until dark. Four of these grounds have some provision for athletics attractive to boys of high-school age. Supervised baseball is also carried on by this department in two fields not connected with playgrounds. Two of the nine high schools have athletic fields.

Thirty-five tennis courts, 12 ball fields, a polo ground, and a practice golf course are maintained by the Office of Public Buildings and Grounds. Permits for these are issued by that office free upon application.

The construction of a complete athletic center is proposed in the eastern part of Potomac Park.

The Department of Playgrounds of the District of Columbia maintains outdoor swimming pools for men, women, and children in the Monument Grounds and outdoor swimming pools for children, which may be used by adults, in connection with three playgrounds. An indoor swimming pool has been opened in the new Central High School.

Ten schools have indoor gymnasiums. Only one of these has been used by persons not directly connected with the school.

School buildings are increasingly used as civic and social centers. It appears that, with the exception of high-school organizations, these activities have not been arranged to have any special interest for young people.

In a few districts noncommercial indoor recreation and several tennis courts are offered by various churches and settlements.

*Recommendations.*¹—I. That an advisory committee of nine be appointed by the ex officio recreation commission.

II. That existing public facilities be used to their fullest extent, and that the necessary supervision be provided from public funds.

III. That additional leaders for special kinds of playground and social-center work be secured.

IV. That in districts where existing facilities are inadequate to meet the needs of all the residents (as shown by intensive studies in this report) additional land and equipment be provided.

V. That the advisory committee give careful consideration to provision for recreation in outlying districts in order that, as a measure of economy, necessary space may be reserved or secured before serious congestion arises.

VI. That ample provision be made for public baths and swimming.

¹ For a more extended discussion see p. 29.

APPENDIX.

TABLES.

TABLE 1.—Population and density per acre of old Washington and outlying health districts, police census of 1913.

Section.	Popula- tion.	Area (streets ex- cluded).	Density per acre.
Old Washington.....	234,085	2,615	89.5
Other districts intensively studied.....	51,320	1,365	37.6
Remainder of Washington.....	67,892	15,450	4.4

TABLE 2.—Population of District of Columbia, by color, age groups, and health districts, police census of 1913.

Health dis- trict.	Total.	White.					Colored.				
		Total.	Under 5 years.	5 to 14 years.	15 to 19 years.	20 years and over.	Total.	Under 5 years.	5 to 14 years.	15 to 19 years.	20 years and over.
Total.	353,297	255,153	20,685	34,494	18,914	181,060	98,144	8,457	13,889	7,249	68,549
1 to 20.....	234,085	161,363	12,830	20,647	11,563	116,323	72,722	6,151	9,602	4,901	52,068
1.....	18,140	11,755	598	1,039	775	9,343	6,385	370	597	376	5,042
2.....	10,360	5,925	290	527	256	4,852	4,435	260	470	279	3,426
3.....	10,292	6,880	563	886	455	4,976	3,412	259	494	271	2,388
4.....	2,226	489	48	92	49	300	1,737	174	296	133	1,134
5.....	18,565	8,064	651	800	561	6,052	10,501	805	1,063	694	7,939
6.....	17,097	14,067	588	1,100	696	11,683	3,030	187	301	204	2,338
7.....	8,245	7,593	291	554	238	6,510	652	24	58	21	549
8.....	15,570	13,305	1,293	2,249	1,036	8,727	2,265	191	370	115	1,589
9.....	22,108	11,014	952	1,546	903	7,613	11,094	909	1,603	710	7,872
10.....	15,693	12,046	860	1,245	617	9,324	3,647	354	381	174	2,738
11.....	8,189	1,578	184	298	135	961	6,611	637	901	365	4,708
12.....	6,587	2,753	248	390	186	1,929	3,834	456	606	245	2,527
13.....	6,283	4,892	614	881	409	2,988	1,391	170	232	112	877
14.....	16,792	14,503	1,273	2,048	1,271	9,916	2,289	217	344	177	1,551
15.....	13,022	10,607	710	1,143	873	7,881	2,415	228	353	204	1,630
16.....	8,633	6,019	632	977	536	3,874	2,614	273	367	267	1,707
17.....	16,121	13,718	1,384	2,191	1,235	8,908	2,403	227	417	199	1,560
18.....	11,570	10,061	915	1,549	816	6,781	1,509	144	306	126	933
19.....	4,385	3,362	415	673	303	1,971	1,023	124	206	115	578
20.....	4,207	2,732	321	464	213	1,734	1,475	142	237	114	982
21.....	1,501	1,048	115	257	80	596	453	50	110	39	254
22.....	2,153	48	6	14	1	27	2,105	268	489	181	1,167
23.....	570	394	39	114	34	207	178	19	39	13	105
24.....	1,868	1,688	192	396	141	969	180	26	38	10	106
25.....	4,871	3,205	375	653	312	1,865	1,666	200	388	132	946
26.....	2,941	2,281	.....	5	20	2,256	660	.....	2	18	640
27.....	4,304	2,501	218	375	150	1,758	1,803	167	391	155	1,090
28.....	816	553	42	131	115	265	263	1	102	152	8
29.....	1,387	1,353	142	260	126	825	34	4	6	4	20
30.....	2,915	1,737	173	341	206	1,017	1,178	149	253	130	646
31.....	4,206	4,063	422	605	363	2,673	143	23	14	20	86
32.....	3,977	3,743	306	584	451	2,402	234	30	37	18	149
33.....	8,549	6,978	521	906	582	4,969	1,571	113	181	139	1,138
34.....	3,214	801	110	133	56	502	2,413	200	358	320	1,535
35.....	11,669	8,894	553	1,047	614	6,680	2,775	248	506	157	1,864

64 FACILITIES FOR CHILDREN'S PLAY, DISTRICT OF COLUMBIA.

TABLE 2.—Population of District of Columbia, by color, age groups, and health police census of 1913—Continued.

Health district.	Total.	White.					Colored.				
		Total.	Under 5 years.	5 to 14 years.	15 to 19 years.	20 years and over.	Total.	Under 5 years.	5 to 14 years.	15 to 19 years.	20 years and over.
36.....	13,848	12,352	1,099	1,770	717	8,766	1,496	147	262	97	990
37.....	1,639	1,481	30	59	64	1,328	158	11	18	12	117
38.....	2,439	2,425	288	400	146	1,591	14	.....	.....	3	11
39.....	1,426	1,254	166	235	106	747	172	30	32	6	104
40.....	2,719	2,580	211	504	148	1,717	139	9	34	9	87
41.....	2,083	1,931	188	245	103	1,395	152	10	15	11	116
42.....	1,345	962	91	177	96	598	383	50	65	35	233
43.....	4,271	3,993	323	498	362	2,810	278	2	7	31	238
44.....	6,491	5,790	365	492	303	4,630	701	33	45	55	568
45.....	1,839	1,123	99	172	70	782	716	73	101	67	475
46.....	1,898	1,708	114	347	266	981	190	2	3	16	169
47.....	3,414	2,969	160	324	250	2,235	445	5	4	13	423
48.....	7,362	5,000	394	777	394	3,435	2,362	203	359	174	1,626
49.....	1,841	1,292	161	267	128	736	549	54	89	41	365
50.....	7,574	6,414	585	1,165	565	4,099	1,160	111	202	107	740
51.....	1,565	1,347	170	204	197	776	218	14	24	97	83
52.....	664	566	60	120	34	352	98	7	13	7	71
53.....	1,853	1,316	137	280	151	748	537	47	100	79	311

TABLE 3.—Density of population of the District of Columbia, by health districts, police census of 1913.

Health district.	Popula- tion.	Streets excluded.		Streets included.	
		Area (acres).	Density per acre.	Area (acres).	Density per acre.
District of Columbia.....	353,297	19,430.5	18.1	35,762.6	9.8
1.....	18,140	178.2	101.7	385.6	47.0
2.....	10,360	120.7	85.8	202.0	51.2
3.....	10,292	102.7	100.2	183.6	56.0
4.....	2,228	78.1	28.5	192.8	11.5
5.....	18,565	177.4	104.6	273.6	67.8
6.....	17,097	144.2	118.5	280.9	60.8
7.....	8,245	140.9	58.5	292.7	28.1
8.....	15,570	156.4	99.5	316.8	48.9
9.....	22,108	196.5	112.5	316.8	69.7
10.....	15,693	115.5	135.8	265.3	59.1
11.....	8,189	72.5	112.9	376.4	21.7
12.....	6,587	134.0	49.1	318.6	20.6
13.....	6,283	95.7	65.6	190.0	33.0
14.....	16,792	191.0	87.9	354.4	47.4
15.....	13,022	120.3	108.2	291.0	44.7
16.....	8,633	106.4	81.1	339.3	25.4
17.....	16,121	159.5	101.0	305.7	52.7
18.....	11,570	139.9	82.7	254.8	45.4
19.....	4,385	70.6	62.1	462.3	9.4
20.....	4,207	113.7	37.0	358.5	11.7
21.....	1,501	1,058.2	1.4	1,526.1	.9
22.....	2,153	524.9	4.1	769.5	2.7
23.....	570	1,190.5	.4	2,112.0	.2
24.....	1,868	575.7	3.2	894.3	2.0
25.....	4,871	668.4	7.2	964.1	5.0
26.....	2,941	188.2	15.6	217.1	13.5
27.....	4,304	2,034.4	2.1	3,169.8	1.3
28.....	816	673.6	1.2	1,472.9	.5
29.....	1,387	213.3	6.5	358.1	3.8
30.....	2,915	525.8	5.5	985.3	2.9
31.....	4,206	168.7	24.9	313.1	13.4
32.....	3,977	676.4	5.8	1,136.8	3.4
33.....	8,549	144.5	59.1	224.5	38.0
34.....	3,214	90.0	35.7	155.1	20.7
35.....	11,669	179.8	64.8	252.5	46.2
36.....	13,848	269.4	51.4	318.6	43.4

TABLE 3.—Density of population of the District of Columbia, by health districts, police census of 1913—Continued.

Health district.	Popula- tion.	Streets excluded.		Streets included.	
		Area (acres).	Density per acre.	Area (acres.)	Density per acre.
37.....	1,639	662.9	2.4	1,773.1	0.9
38.....	2,439	116.7	20.8	291.0	8.3
39.....	1,426	236.2	6.0	420.5	3.3
40.....	2,719	728.2	3.7	1,084.4	2.5
41.....	2,083	709.5	2.9	1,147.8	1.8
42.....	1,345	985.5	1.3	3,172.6	.4
43.....	4,271	387.7	11.0	844.8	5.0
44.....	6,491	135.2	48.0	377.4	17.2
45.....	1,839	46.8	39.2	68.8	26.7
46.....	1,898	675.4	2.8	1,051.4	1.8
47.....	3,414	349.5	9.7	603.6	5.6
48.....	7,362	217.6	33.8	505.0	14.5
49.....	1,841	51.4	35.8	91.8	20.0
50.....	7,574	496.9	15.2	821.8	9.2
51.....	1,565	567.5	2.7	994.4	1.5
52.....	664	418.4	1.5	858.5	.7
53.....	1,853	527.0	3.5	826.4	2.2

TABLE 4.—Attendance at municipal playgrounds, by seasons, 1914.¹

Playground.	Attendance.							
	Summer.				Spring and fall.			
	Total.	Average.			Total.	Average.		
		Per week.	Different chil- dren.			Per week.	Different chil- dren.	
			Per day.	Per week.			Per day.	Per week.
Total.....	310,955	23,802	4,048	7,410	508,487	22,740	3,864	10,084
White.....	259,594	19,853	3,378	6,094	384,163	17,510	2,952	7,558
Bloomingdale.....	39,177	3,055	508	717	62,328	2,709	492	721
Bruen Home.....	21,052	1,542	140	140	.....	.....	.....	.....
Gallinger ²	13,894	1,061	177	354	33,932	1,479	227	735
Garfield Park ²	21,512	1,654	330	554	38,526	1,679	329	839
Georgetown.....	21,512	1,693	307	615	38,526	2,312	365	1,141
Montessori.....	4,905	271	62	171	.....	.....	.....	.....
Mount Pleasant.....	37,919	2,914	479	927	77,036	3,523	566	1,218
Neighborhood House ²	13,172	1,013	316	171	.....	.....	.....	.....
New York Avenue ²	22,932	1,764	229	585	43,973	1,912	314	956
Rosedale ²	39,769	3,059	526	1,019	55,389	2,408	410	1,206
Virginia Avenue ²	23,750	1,827	304	841	34,453	1,488	249	742
Colored.....	51,361	3,949	670	1,316	124,324	5,230	912	2,526
Cardozo ²	23,391	1,798	312	599	39,785	1,555	315	684
Howard.....	27,970	2,151	358	717	84,539	3,675	597	1,842

¹Since survey was completed Bruen Home, Gallinger, Montessori, and Neighborhood House Playgrounds have been discontinued and Willow Tree Park, new Gallinger, and Wilcox Playgrounds opened. All of these except Wilcox are in the old city.
²In old city.

TABLE 5.—Attendance at school summer playgrounds, 1914.¹

Playground.	Attendance.		
	Total.	Different children.	
		Average per day.	Average per week.
Total.....	117, 270	3, 897	4, 871
White.....	87, 960	2, 920	3, 649
Arthur ²	5, 580	186	233
Bowen ²	8, 940	298	372
Chevy Chase.....	2, 130	59	71
Cleveland ²	8, 130	271	339
Congress Heights.....	3, 900	130	162
Henry ²	8, 640	288	360
Jefferson ²	14, 250	475	594
Ketcham.....	6, 630	221	276
Ludlow ²	7, 680	256	320
Monroe.....	8, 880	296	371
Petworth.....	4, 350	145	182
Wallach ²	8, 850	295	369
Colored.....	29, 310	977	1, 222
Birney.....	5, 370	179	224
Giddings ²	4, 320	144	180
Langston ²	6, 120	204	255
Magruder ²	5, 100	170	213
Phillips.....	8, 400	280	350

¹ Season 1916: Chevy Chase and Petworth discontinued; Bryan, Force, Langdon, Morgan, Powell added.
² In old city.

TABLE 6.—Motion-picture theaters: Number, capacity, and daily attendance, by sections of the city and color, 1914.

Section.	Number of thea- ters.	Seating capacity.	Daily attendance.		
			Total.	Adults.	Minors.
The city.....	73	27, 796	44, 088	35, 858	8, 230
White.....	61	25, 661	39, 416	32, 242	7, 174
Northwest.....	44	19, 225	29, 734	24, 668	5, 066
Southwest.....	2	392	566	398	168
Northeast.....	8	3, 515	4, 972	3, 778	1, 194
Southeast.....	7	2, 529	4, 144	3, 398	746
Colored.....	7	1, 300	2, 740	2, 100	640
Northwest.....	6	1, 150	2, 440	1, 900	540
Southeast.....	1	150	300	200	100
White and colored.....	5	836	1, 932	1, 516	416
Northwest.....	4	651	1, 612	1, 316	296
Southwest.....	1	185	320	200	120

LAWS AFFECTING RECREATION IN THE DISTRICT OF COLUMBIA.

PRESERVATION OF PUBLIC PEACE.

THE PRESERVATION OF PUBLIC PEACE AND PROTECTION OF PROPERTY. [27 STATUTES AT LARGE C 320 P 322 (ACT OF JULY 29, 1892) AS AMENDED BY 30 STAT L C 638 P 723 (ACT OF JULY 8, 1898)]

It shall not be lawful for any person or persons within the District of Columbia to throw any stone or other missile in any street, avenue, alley, road, or highway, or open space, or public square, or inclosure, or to throw any stone or other missile from any place into any street, avenue, road, or highway, alley, open space, public square, or inclosure, under a penalty of not more than five dollars for every such offense. [s 3]

It shall not be lawful for any person or persons to set up or fly any kite, or set up or fly any fire balloon or parachute in or upon or over any street, avenue, alley, open space, public inclosure, or square within the limits of the cities of Washington and Georgetown, under a penalty of not more than ten dollars for each and every such offense. [s 4]

It shall not be lawful for any person or persons within the District of Columbia to congregate and assemble in any street, avenue, alley, road, or highway, or in or around any public building or inclosure, or any park or reservation, or at the entrance of any private building or inclosure, and engage in loud and boisterous talking or other disorderly conduct, or to insult or make rude or obscene gestures or comments or observations on persons passing by, or in their hearing, or to crowd, obstruct, or incommode the free use of any such street, avenue, alley, road, highway, or any of the foot pavements thereof, or the free entrance into any public or private building or inclosure; it shall not be lawful for any person or persons to curse, swear, or make use of any profane language or indecent or obscene words, or engage in any disorderly conduct in any street, avenue, alley, road, highway, public park or inclosure, public building, church, or assembly room, or in any other public place, or in any place wherefrom the same may be heard in any street, avenue, alley, road, highway, public park or inclosure, or other building, or in any premises other than those where the offense was committed, under a penalty of not more than twenty-five dollars for each and every such offense. [s 5 and 6]

It shall not be lawful for any person or persons to entice, induce, urge, or cause any dogs to engage in a fight in any street, alley, road, or highway, open space, or public square in the District of Columbia, or to urge, entice, or cause such dogs to continue or prolong such fight, under a penalty of not more than five dollars for each and every offense; and any person or persons who shall induce or cause any animal of the dog kind to run after, bark at, frighten, or bite any person, horse, or horses, cows, cattle of any kind, or other animals lawfully passing along or standing in or on any street, avenue, road, or highway, or alley in the District of Columbia, shall forfeit and pay for every such offense a sum not exceeding five dollars. [s 10]

It shall not be lawful for any person or persons within the limits of the District of Columbia to kindle or set on fire, or be present, aiding, consenting, or causing it to be done, in any street, avenue, road, or highway, alley, open ground, or lot, any box, barrel, straw, shavings, or other combustible, between the setting and rising of the sun; and, any person offending against the provisions of this act shall, on conviction thereof, forfeit and pay a sum not exceeding ten dollars for each and every offense. [s 14]

The provisions of the several laws and regulations within the District of Columbia for the protection of public or private property and the preservation of peace and order be, and the same are hereby, extended to all public buildings and public grounds belonging to the United States within the District of Columbia. And any person guilty of disorderly and unlawful conduct in or about the same, * * * shall, upon conviction thereof, be fined not more than fifty dollars. [s 15]

TABLE 5.—Attendance at school summer playgrounds, 1914.¹

Playground.	Attendance.		
	Total.	Different children.	
		Average per day.	Average per week.
Total.....	117,270	3,897	4,871
White.....	87,960	2,920	3,649
Arthur ²	5,580	186	233
Bowen ²	8,940	298	372
Chevy Chase.....	2,130	59	71
Cleveland ²	8,130	271	339
Congress Heights.....	3,900	130	162
Henry ²	8,640	288	360
Jefferson ²	14,250	475	594
Ketcham.....	6,630	221	276
Ludlow ²	7,680	256	320
Monroe.....	8,880	296	371
Petworth.....	4,350	145	182
Wallach ²	8,850	295	369
Colored.....	29,310	977	1,222
Birney.....	5,370	179	224
Giddings ²	4,320	144	180
Langston ²	6,120	204	255
Magruder ²	5,100	170	213
Phillips.....	8,400	280	350

¹ Season 1916: Chevy Chase and Petworth discontinued; Bryan, Force, Langdon, Morgan, Powell added.

² In old city.

TABLE 6.—Motion-picture theaters: Number, capacity, and daily attendance, by sections of the city and color, 1914.

Section.	Number of theaters.	Seating capacity.	Daily attendance.		
			Total.	Adults.	Minors.
The city.....	73	27,796	44,088	35,858	8,230
White.....	61	25,661	39,416	32,242	7,174
Northwest.....	44	19,225	29,734	24,668	5,066
Southwest.....	2	392	566	398	168
Northeast.....	8	3,515	4,972	3,778	1,194
Southeast.....	7	2,529	4,144	3,398	746
Colored.....	7	1,300	2,740	2,100	640
Northwest.....	6	1,150	2,440	1,900	540
Southeast.....	1	150	300	200	100
White and colored.....	5	836	1,932	1,516	416
Northwest.....	4	651	1,612	1,316	296
Southwest.....	1	185	320	200	120

LAWS AFFECTING RECREATION IN THE DISTRICT OF COLUMBIA.

PRESERVATION OF PUBLIC PEACE.

THE PRESERVATION OF PUBLIC PEACE AND PROTECTION OF PROPERTY. [27 STATUTES AT LARGE C 320 P 322 (ACT OF JULY 29, 1892) AS AMENDED BY 30 STAT L C 638 P 723 (ACT OF JULY 8, 1898)]

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It shall not be lawful for any person or persons to set up or fly any kite, or set up or fly any fire balloon or parachute in or upon or over any street, avenue, alley, open space, public inclosure, or square within the limits of the cities of Washington and Georgetown, under a penalty of not more than ten dollars for each and every such offense. [s 4]

It shall not be lawful for any person or persons within the District of Columbia to congregate and assemble in any street, avenue, alley, road, or highway, or in or around any public building or inclosure, or any park or reservation, or at the entrance of any private building or inclosure, and engage in loud and boisterous talking or other disorderly conduct, or to insult or make rude or obscene gestures or comments or observations on persons passing by, or in their hearing, or to crowd, obstruct, or incommode the free use of any such street, avenue, alley, road, highway, or any of the foot pavements thereof, or the free entrance into any public or private building or inclosure; it shall not be lawful for any person or persons to curse, swear, or make use of any profane language or indecent or obscene words, or engage in any disorderly conduct in any street, avenue, alley, road, highway, public park or inclosure, public building, church, or assembly room, or in any other public place, or in any place wherefrom the same may be heard in any street, avenue, alley, road, highway, public park or inclosure, or other building, or in any premises other than those where the offense was committed, under a penalty of not more than twenty-five dollars for each and every such offense. [s 5 and 6]

It shall not be lawful for any person or persons to entice, induce, urge, or cause any dogs to engage in a fight in any street, alley, road, or highway, open space, or public square in the District of Columbia, or to urge, entice, or cause such dogs to continue or prolong such fight, under a penalty of not more than five dollars for each and every offense; and any person or persons who shall induce or cause any animal of the dog kind to run after, bark at, frighten, or bite any person, horse, or horses, cows, cattle of any kind, or other animals lawfully passing along or standing in or on any street, avenue, road, or highway, or alley in the District of Columbia, shall forfeit and pay for every such offense a sum not exceeding five dollars. [s 10]

It shall not be lawful for any person or persons within the limits of the District of Columbia to kindle or set on fire, or be present, aiding, consenting, or causing it to be done, in any street, avenue, road, or highway, alley, open ground, or lot, any box, barrel, straw, shavings, or other combustible, between the setting and rising of the sun; and, any person offending against the provisions of this act shall, on conviction thereof, forfeit and pay a sum not exceeding ten dollars for each and every offense. [s 14]

The provisions of the several laws and regulations within the District of Columbia for the protection of public or private property and the preservation of peace and order be, and the same are hereby, extended to all public buildings and public grounds belonging to the United States within the District of Columbia. And any person guilty of disorderly and unlawful conduct in or about the same, * * * shall, upon conviction thereof, be fined not more than fifty dollars. [s 15]

It shall not be lawful for any person or persons to play the game of football, or any other game with a ball, in any of the streets, avenues, or alleys in the cities of Washington and Georgetown; nor shall it be lawful for any person or persons to play the game of bandy, shindy, or any other game by which a ball, stone, or other substance is struck or propelled by any stick, cane, or other substance in any street, avenue, or alley in the cities of Washington and Georgetown, under a penalty of not more than five dollars for each and every such offense. [s 17]

PUBLIC PARK LANDS.

CARE AND CONTROL OF LAND BETWEEN BUILDING LINE AND SIDEWALK. [DISTRICT OF COLUMBIA COMPILED STATUTES 1889 s 121 P 179 (1ST LEGISLATIVE ASSEMBLY ACT OF JUNE 20, 1872, C 29 s 1 P 41)]

It shall not be lawful for any person or persons who are not the owners or occupants of the lots lying on the same street or avenue, and fronting on the parks now made, or which shall hereafter be made on the side or sides of any street or avenue in the cities of Washington and Georgetown to enter, walk, or trespass on such parks, or to cut or injure in any way, the grass, flowers, trees, or shrubbery growing thereon, or to deface, climb upon, or injure the railings, posts or chains inclosing the same, but such parks shall be under the immediate care and keeping of the owners or occupants of the lots fronting thereon, and on the same side of the streets or avenues, who may enter, care for, and use them for such purpose, and in such ways as will not injure the grass, trees, shrubbery, fences, posts, chains and railings upon and inclosing the same, subject to such general control and regulations as the Board of Commissioners [Public Works] may from time to time prescribe. [For present jurisdiction, see act concerning control of street parking, below].

TRESPASSING ON PARK LAND. [D C COMP STAT 1889 s 124 P 179 (3D LEGISLATIVE ASSEMBLY ACT OF JUNE 26, 1873, C 51 P 124)]

No person shall walk over or through any public park or other ground, not set apart or intended for travel by the District of Columbia, or the proper branch of the government thereof, or in any manner trespass thereon, or trespass on any reservation or other land or property of the United States, within the said District, or ride through or over the same, or drive or permit to be driven over or through the same, any animal, animals, or any creature * * *; and if any person or persons shall do any act or thing herein mentioned, or direct or suffer the same to be done, he, she, or they shall be subject to a penalty of not less than five nor more than twenty dollars for each offense, or for the doing of any of the matters or things herein mentioned, or intended to be prohibited or prevented, to be recovered in the name of the District of Columbia as other fines and penalties against the law of said District are or may be recoverable.

CONTROL OF STREET PARKING VESTED IN THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA. [30 STAT L C 543 P 570 (ACT OF JULY 1, 1898) AS AMENDED BY 33 STAT L C 89 P 10 (ACT OF FEB 2, 1904) AND 34 STAT L C 1622 P 112 (ACT OF APR 14, 1906)]

The jurisdiction and control of the street parking in the streets and avenues of the District of Columbia is hereby transferred to and vested in the Commissioners of the District of Columbia. [s 1]

The park system of the District of Columbia is hereby placed under the exclusive charge and control of the Chief of Engineers of the United States Army, under such regulations as may be prescribed by the President of the United States, through the Secretary of War.

The said park system shall be held to comprise:

(a) All public spaces laid down as reservations on the map of eighteen hundred and ninety-four accompanying the annual report for eighteen hundred and ninety-four of the officer in charge of public buildings and grounds:

(b) All portions of the space in the streets and avenues of the said District, after the same shall have been set aside by the Commissioners of the District of Columbia for park purposes.

Provided, That no areas less than two hundred and fifty square feet between sidewalk lines shall be included within the said park system, and no improve-

ments shall be made in unimproved public spaces in streets between building lines or building lines prolonged until the outlines of such portions as are to be improved as parks shall have been laid out by the Commissioners of the District of Columbia: *And provided further*, That the Chief of Engineers is authorized temporarily to turn over the care of any of the parking spaces included in classes (a) and (b) above, to private owners of adjoining lands under such regulations as he may prescribe, and with the condition that the said private owners shall pay special assessments for improvements contiguous to such parking, under the same regulations as are or may be prescribed for private lands: *And provided further*, That the Commissioners of the District of Columbia are authorized and directed to denominate portions of streets in the District of Columbia as business streets and to authorize the use, on such portions of streets, for business purposes by abutting property owners, under such general regulations as said Commissioners may prescribe, of so much of the sidewalk and parking as may not be needed, in the judgment of said Commissioners, by the general public, under the following conditions, namely: First, where in a portion of a street not already denominated a business street a majority of a frontage not less than three blocks in length is occupied and used for business purposes; and, second, where a portion of a street has already been denominated a business street and there exists adjoining such portion a block or more whose frontage is occupied and used for business purposes.

This act shall not affect in any manner the provisions in the act of March third, eighteen hundred and ninety-one, entitled "An act making appropriations to supply deficiencies in the appropriations for the fiscal year ending June thirtieth, eighteen hundred and ninety-one, and for prior years, and for other purposes," that no permits for projections beyond the building line on the streets and avenues of the city of Washington shall be granted except upon special application and with the concurrence of all said commissioners and the approval of the Secretary of War; and the operation of said provision is hereby extended to the entire District of Columbia. [s 3]

When, in the judgment of the Commissioners of the District of Columbia, the public necessity or convenience requires them to enter upon any of the spaces or reservations under the jurisdiction of the Chief of Engineers, for the purpose of widening the roadway of any street or avenue adjacent thereto or to establish sidewalks along the same, the Chief of Engineers, with the approval of the Secretary of War, is authorized to grant the necessary permission upon the application of the commissioners. [s 4]

When in accordance with law or mutual legal agreement, spaces or portions of public land are transferred from the jurisdiction of the Chief of Engineers of the United States Army, as established by this act to that of the Commissioners of the District of Columbia, or vice versa, the letters exchanged between them of transfer and acceptance shall be sufficient authority for the necessary change in the official maps and for record when necessary. [s 5]

The said Chief of Engineers and the said commissioners are hereby authorized to make all needful rules and regulations for the government and proper care of all the public grounds placed by this act under their respective charge and control; and to annex to such rules and regulations such reasonable penalties as will secure their enforcement. [s 6]

CARE OF SIDEWALKS, ETC., AROUND PUBLIC GROUNDS. [35 STAT L C 299 P 994 (ACT OF MAR 4, 1909)]

The application of the rules and regulations heretofore prescribed or that may be hereafter prescribed by the Chief of Engineers, United States Army, under the authority granted by section six of an act of Congress approved July first, eighteen hundred and ninety-eight, for the government and proper care of all public grounds placed by that act under the charge and control of the said Chief of Engineers, is hereby extended to cover the sidewalks around the public grounds and the carriageways of such streets as lie between and separate the said public grounds.

JURISDICTION OF CHIEF OF ENGINEERS. [32 STAT L C 594 P 152 (ACT OF APR 28, 1902)]

The Chief of Engineers shall have charge of the public buildings and grounds in the District of Columbia, under such regulations as may be prescribed by the President, through the War Department, except those buildings and grounds which are otherwise provided for by law; * * *.

It shall not be lawful for any person or persons to play the game of football, or any other game with a ball, in any of the streets, avenues, or alleys in the cities of Washington and Georgetown; nor shall it be lawful for any person or persons to play the game of bandy, shindy, or any other game by which a ball, stone, or other substance is struck or propelled by any stick, cane, or other substance in any street, avenue, or alley in the cities of Washington and Georgetown, under a penalty of not more than five dollars for each and every such offense. [s 17]

PUBLIC PARK LANDS.

CARE AND CONTROL OF LAND BETWEEN BUILDING LINE AND SIDEWALK. [DISTRICT OF COLUMBIA COMPILED STATUTES 1889 s 121 P 179 (1ST LEGISLATIVE ASSEMBLY ACT OF JUNE 20, 1872, C 29 s 1 P 41)]

It shall not be lawful for any person or persons who are not the owners or occupants of the lots lying on the same street or avenue, and fronting on the parks now made, or which shall hereafter be made on the side or sides of any street or avenue in the cities of Washington and Georgetown to enter, walk, or trespass on such parks, or to cut or injure in any way, the grass, flowers, trees, or shrubbery growing thereon, or to deface, climb upon, or injure the railings, posts or chains inclosing the same, but such parks shall be under the immediate care and keeping of the owners or occupants of the lots fronting thereon, and on the same side of the streets or avenues, who may enter, care for, and use them for such purpose, and in such ways as will not injure the grass, trees, shrubbery, fences, posts, chains and railings upon and inclosing the same, subject to such general control and regulations as the Board of Commissioners [Public Works] may from time to time prescribe. [For present jurisdiction, see act concerning control of street parking, below].

TRESPASSING ON PARK LAND. [D C COMP STAT 1889 s 124 P 179 (3D LEGISLATIVE ASSEMBLY ACT OF JUNE 26, 1873, C 51 P 124)]

No person shall walk over or through any public park or other ground, not set apart or intended for travel by the District of Columbia, or the proper branch of the government thereof, or in any manner trespass thereon, or trespass on any reservation or other land or property of the United States, within the said District, or ride through or over the same, or drive or permit to be driven over or through the same, any animal, animals, or any creature * * *; and if any person or persons shall do any act or thing herein mentioned, or direct or suffer the same to be done, he, she, or they shall be subject to a penalty of not less than five nor more than twenty dollars for each offense, or for the doing of any of the matters or things herein mentioned, or intended to be prohibited or prevented, to be recovered in the name of the District of Columbia as other fines and penalties against the law of said District are or may be recoverable.

CONTROL OF STREET PARKING VESTED IN THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA. [30 STAT L C 543 P 570 (ACT OF JULY 1, 1898) AS AMENDED BY 33 STAT L C 89 P 10 (ACT OF FEB 2, 1904) AND 34 STAT L C 1622 P 112 (ACT OF APR 14, 1906)]

The jurisdiction and control of the street parking in the streets and avenues of the District of Columbia is hereby transferred to and vested in the Commissioners of the District of Columbia. [s 1]

The park system of the District of Columbia is hereby placed under the exclusive charge and control of the Chief of Engineers of the United States Army, under such regulations as may be prescribed by the President of the United States, through the Secretary of War.

The said park system shall be held to comprise:

(a) All public spaces laid down as reservations on the map of eighteen hundred and ninety-four accompanying the annual report for eighteen hundred and ninety-four of the officer in charge of public buildings and grounds:

(b) All portions of the space in the streets and avenues of the said District, after the same shall have been set aside by the Commissioners of the District of Columbia for park purposes.

Provided, That no areas less than two hundred and fifty square feet between sidewalk lines shall be included within the said park system, and no improve-

ments shall be made in unimproved public spaces in streets between building lines or building lines prolonged until the outlines of such portions as are to be improved as parks shall have been laid out by the Commissioners of the District of Columbia: *And provided further*, That the Chief of Engineers is authorized temporarily to turn over the care of any of the parking spaces included in classes (a) and (b) above, to private owners of adjoining lands under such regulations as he may prescribe, and with the condition that the said private owners shall pay special assessments for improvements contiguous to such parking, under the same regulations as are or may be prescribed for private lands: *And provided further*, That the Commissioners of the District of Columbia are authorized and directed to denominate portions of streets in the District of Columbia as business streets and to authorize the use, on such portions of streets, for business purposes by abutting property owners, under such general regulations as said Commissioners may prescribe, of so much of the sidewalk and parking as may not be needed, in the judgment of said Commissioners, by the general public, under the following conditions, namely: First, where in a portion of a street not already denominated a business street a majority of a frontage not less than three blocks in length is occupied and used for business purposes; and, second, where a portion of a street has already been denominated a business street and there exists adjoining such portion a block or more whose frontage is occupied and used for business purposes.

This act shall not affect in any manner the provisions in the act of March third, eighteen hundred and ninety-one, entitled "An act making appropriations to supply deficiencies in the appropriations for the fiscal year ending June thirtieth, eighteen hundred and ninety-one, and for prior years, and for other purposes," that no permits for projections beyond the building line on the streets and avenues of the city of Washington shall be granted except upon special application and with the concurrence of all said commissioners and the approval of the Secretary of War; and the operation of said provision is hereby extended to the entire District of Columbia. [s 3]

When, in the judgment of the Commissioners of the District of Columbia, the public necessity or convenience requires them to enter upon any of the spaces or reservations under the jurisdiction of the Chief of Engineers, for the purpose of widening the roadway of any street or avenue adjacent thereto or to establish sidewalks along the same, the Chief of Engineers, with the approval of the Secretary of War, is authorized to grant the necessary permission upon the application of the commissioners. [s 4]

When in accordance with law or mutual legal agreement, spaces or portions of public land are transferred from the jurisdiction of the Chief of Engineers of the United States Army, as established by this act to that of the Commissioners of the District of Columbia, or vice versa, the letters exchanged between them of transfer and acceptance shall be sufficient authority for the necessary change in the official maps and for record when necessary. [s 5]

The said Chief of Engineers and the said commissioners are hereby authorized to make all needful rules and regulations for the government and proper care of all the public grounds placed by this act under their respective charge and control; and to annex to such rules and regulations such reasonable penalties as will secure their enforcement. [s 6]

CARE OF SIDEWALKS, ETC., AROUND PUBLIC GROUNDS. [35 STAT L C 299 P 994 (ACT OF MAR 4, 1909)]

The application of the rules and regulations heretofore prescribed or that may be hereafter prescribed by the Chief of Engineers, United States Army, under the authority granted by section six of an act of Congress approved July first, eighteen hundred and ninety-eight, for the government and proper care of all public grounds placed by that act under the charge and control of the said Chief of Engineers, is hereby extended to cover the sidewalks around the public grounds and the carriageways of such streets as lie between and separate the said public grounds.

JURISDICTION OF CHIEF OF ENGINEERS. [32 STAT L C 594 P 152 (ACT OF APR 28, 1902)]

The Chief of Engineers shall have charge of the public buildings and grounds in the District of Columbia, under such regulations as may be prescribed by the President, through the War Department, except those buildings and grounds which are otherwise provided for by law; * * *.

70 FACILITIES FOR CHILDREN'S PLAY, DISTRICT OF COLUMBIA.

USE OF PUBLIC LAND AS PLAYGROUNDS. [32 STAT L C 1007 P 1122 (ACT OF MAR 3, 1903)]

The officer in charge of public buildings and grounds may hereafter authorize the temporary use of the Monument Grounds or grounds south of the Executive Mansion or other reservations in the District of Columbia for playgrounds for children and adults, under regulations to be prescribed by him.

ERECTION OF BOATHOUSES. [35 STAT L C 200 s 1 P 355 (ACT OF MAY 27, 1908)]

Licenses may be granted for the erection of boathouses along the banks of the tidal reservoir on the Potomac River fronting Potomac Park, under regulations to be prescribed by the Chief of Engineers, and all such licenses granted under this authority shall be revocable, without compensation, by the Secretary of War.

TEMPORARY STRUCTURES ON LAND USED AS PLAYGROUNDS. [35 STAT L C 200 s 1 P 355 (ACT OF MAY 27, 1908)]

The officer in charge of public buildings and grounds is authorized to grant licenses, revocable by him without compensation, to erect temporary structures upon reservations used as children's playgrounds, under such regulations as he may impose.

USE OF CAPITOL GROUNDS.

It shall be the duty of the Capitol police hereafter to prevent any portion of the Capitol Grounds and terraces from being used as playgrounds or otherwise, so far as may be necessary to protect the public property, turf and grass from destruction or injury. [19 Stat L C 86 p 41 (act of Apr 29, 1876)]

Public travel in and occupancy of the Capitol Grounds shall be restricted to the roads, walks, and places prepared for the purpose by flagging, paving, or otherwise. [22 Stat L C 258 s 1 p 126 (act of July 1, 1882)]

Nothing in the act to regulate the use of the Capitol Grounds, approved July first, eighteen hundred and eighty-two, shall be construed to prohibit concerts on the Capitol Grounds at times when neither House of Congress is sitting by any band in the service of the United States under the direction of the Architect of the Capitol. [31 Stat L C 791 p 613 (act of June 6, 1900)]

NATIONAL ZOOLOGICAL PARK AND ROCK CREEK PARK.

The National Zoological Park is hereby placed under the direction of the regents of the Smithsonian Institution, who are authorized to * * * administer the said Zoological Park for the advancement of science and the instruction and recreation of the people. [26 Stat L C 173 s 2 p 78 (act of Apr 30, 1890)]

The public park authorized and established by this act [Rock Creek Park] shall be under the joint control of the Commissioners of the District of Columbia and the Chief of Engineers of the United States Army, * * * [26 Stat L C 1001 s 7 p 495 (act of Sept 27, 1890)]

PUBLIC SCHOOL BUILDINGS AND GROUNDS.

USE AS SOCIAL CENTERS, ETC. [38 STAT L C 165 P 1190 (ACT OF MAR. 4, 1915)]

The control of the public schools in the District of Columbia by the board of education shall extend to, include, and comprise the use of the public school buildings and grounds by pupils of the public schools, other children and adults, for supplementary educational purposes, civic meetings for the free discussion of public questions, social centers, centers of recreation, playgrounds. The privilege of using said buildings and grounds for any of said purposes may be granted by the board upon such terms and conditions and under such rules and regulations as the board may prescribe. [s 1]

The board of education is authorized to accept, upon written recommendation of the superintendent of schools, free and voluntary services of the teachers of the public schools, other educators, lecturers, and social workers and public officers of the United States and the District of Columbia: *Provided*, That teachers of the public schools shall not be required or compelled to perform any

such services or solicited to make any contribution for such purposes: *Provided further*, That the public school buildings and grounds of the District of Columbia shall be used for no purpose whatsoever other than those directly connected with the public school system and as further provided for in this Act. [s 2]

LICENSING OF COMMERCIAL RECREATION.

LICENSE TAXES. [32 STAT L C 1352 s 7 P 622 (ACT OF JULY 1, 1902) AS AMENDED BY 33 STAT L C 1815 P 565 (ACT OF APR 28, 1904)].

No person shall engage in or carry on any business, trade, profession, or calling in the District of Columbia for which a license tax is imposed by the terms of this section without having first obtained a license so to do. Applications for licenses shall be made to the assessor of the District of Columbia, and no license shall be granted until payment for the same shall have been made. * * * [par 1]

When more than one business, trade, profession, or calling for which a license is herein prescribed shall be carried on by the same person, the license tax shall be paid for each such business, trade, profession, or calling: *Provided*, That licenses issued under any of the provisions of this act shall be good only for the location designated thereon, and no license shall be issued for more than one place of business, profession, or calling, without the payment of a separate tax for each: *Provided further*, That no license shall be granted under the provisions of this section, relating to hotels and theaters, until the inspector of buildings and the chief officer of the fire department have certified in writing to the assessor that the applicant for license has complied with the laws enacted and the regulations made and promulgated for the protection of life and property. [par 2]

No person shall set up, operate, or conduct any business or device by or in which any person, animal, or living object shall act or be exposed as a target for any ball, projectile, missile, or thing thrown or projected, for or in consideration of profit or gain, directly or indirectly. [par 6]

Owners, lessees, or managers of theaters having a stage and movable scenery used for the purpose of acting, performing, or playing any play, farce, interlude, opera, or other theatrical or dramatic performance, or any scene, section, or portion of any play, farce, burlesque, or drama of any description, for gain, shall pay a license tax of one hundred dollars per annum: *Provided*, That licenses may be granted for theatrical performances for one week on the payment of twenty dollars, and for less than one week on the payment of ten dollars: *And provided further*, That the proprietors of buildings, other than theaters, where exhibitions, lectures, or entertainments of any description are conducted for gain shall pay a license tax of one hundred dollars per annum; or for lesser periods as follows: Three dollars per day, or ten dollars for the first week, and five dollars for each subsequent consecutive week: *And provided further*, That for entertainments, concerts, or performances of any kind given in church premises or private residences where the proceeds are intended for church or charitable purposes, and where no rental is charged, no license tax shall be required. [par 20]

Every person who exhibits paintings, pictures, or works of art, or makes industrial, mechanical, agricultural, food, or floral exhibitions, including cattle and poultry shows, freaks and museum attractions, side shows, and all other lawful exhibitions not otherwise provided for, shall pay a license tax of three dollars per day, or ten dollars for the first week and five dollars additional for each subsequent consecutive week, and for an annual license the tax shall be one hundred dollars. [par 21]

Persons conducting concerts, entertainments, or balls to which an admission fee is charged, directly or indirectly, shall pay a license tax of three dollars for each day or night. [par 22]

Proprietors or owners of any circus shall pay a license tax of two hundred dollars per day. [par 23]

Owners or lessees of grounds used for horse racing, tournaments, athletic sports, baseball, football, polo, golf, and kindred games, or where feats of horsemanship are performed, to which admission fees are charged, or which are used for profit or gain, directly or indirectly, shall pay a license tax of twenty dollars per week or five dollars per day. [par 24]

Owners or lessees of grounds or premises used for picnics or lawn fêtes, or resorts where theatrical or musical attractions or other amusements are presented, to which admission fees are charged or which are used for profit or gain, directly or indirectly, and which are not taxed under any other paragraph of

this section, shall pay a license tax of three dollars per day or ten dollars per week and five dollars additional for each subsequent consecutive week, or for an annual license a tax of one hundred dollars. [par 25]

Owners or lessees of buildings used for skating rinks, fairs, carnivals, or amusements not otherwise provided for in this section shall pay a license tax of three dollars per day, or ten dollars for the first week and five dollars additional for each subsequent consecutive week, or for an annual license a tax of one hundred dollars. [par 26]

Owners or lessees of shooting galleries, fencing schools, public gymnasiums, places where firearms of any description are used, or schools where the art of self-defense is taught shall pay a license tax of twelve dollars per annum: *Provided*, That no place of business or shooting gallery where firearms are to be used shall be licensed until the inspector of buildings for the District of Columbia shall furnish a certificate that suitable precautions have been taken for the public safety by the erection of iron shields and such appliances as in his judgment may be necessary: *And provided further*, That before such license shall be issued the proprietor shall furnish to the assessor of the District of Columbia the written consent of a majority of the occupants and residents on the same side of the square or block in which the proposed gallery is to be located and also on the confronting side of the square fronting opposite to the same. The major and superintendent of police is hereby authorized to prescribe the caliber of firearms and kind of cartridges to be used in such licensed places. [par 27]

Proprietors or owners of apparatus or machines known as merry-go-rounds, flying horses, or similar devices for amusement shall pay a license tax of twelve dollars for the first week and ten dollars for each subsequent consecutive week, or three dollars per diem: *Provided*, That license therefor may be refused in the discretion of the Commissioners of the District of Columbia. [par 28]

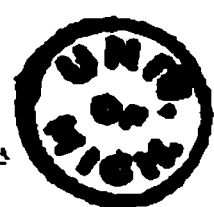
Proprietors or owners of slot or automatic machines, so called (telephones excepted), by which objects, pictures, or figures are presented to public view or musical or vocal exhibitions are automatically given on the deposit of money or metal, or where a pecuniary consideration is received for the use of said apparatus or machines, shall pay a license tax of two dollars per annum for each machine or apparatus: *Provided*, That on the payment of a license tax of fifty dollars per annum the number of machines at any one location shall not be limited: *And provided further*, That no license shall be issued for less than two dollars. [par 29]

Keepers of billiard, bagatelle, jenny lind, and pool tables, shuffleboards, or any table upon which legitimate games are played within the District of Columbia for public use, or for profit or gain, shall continue to pay to the collector of taxes of the District of Columbia twelve dollars per annum license for each table and be subject to the provisions of the act of Congress approved February twenty-five, eighteen hundred and ninety-seven, entitled "An act to license billiard and pool tables in the District of Columbia, and for other purposes." Hereafter proprietors of bowling alleys in the District of Columbia shall pay to the collector of taxes of said district an annual license tax of twelve dollars for each alley. [par 45]

[For provisions concerning fire escapes, see 34 Stat L C 957 p 70 (act of Mar 19, 1906) as amended by C 2566 p 1247 (act of Mar 2, 1907)]

REVOCATION OF LICENSES. [31 STAT L JOINT RESOLUTION No 13 P 1463 (ACT OF MAR 1, 1901)]

Any license issued by the assessor of the District of Columbia to the proprietor of a theater or other public place of amusement in the District of Columbia may be terminated by the Commissioners of the District of Columbia whenever it shall appear to them that, after due notice, the person holding such license shall have failed to comply with such regulations as may be prescribed by the said commissioners for the public decency.



U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

HOW TO CONDUCT A
CHILDREN'S HEALTH
CONFERENCE

BY

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HOW TO CONDUCT A CHILDREN'S HEALTH CONFERENCE.

DEFINITION AND PURPOSE OF A CHILDREN'S HEALTH CONFERENCE.

What is a children's health conference?—This is a conference of physicians and mothers to determine the development and present condition of children brought by their mothers for examination. It includes a careful physical examination of each child, in which the child is weighed, measured, and compared point by point with the normal child, in order that the mother may see where she is succeeding, where she is failing, and how she may secure better results.

The examination is noncompetitive and no score card is used. A children's health conference is not a contest or a clinic. It is intended neither for the child of exceptional development nor for the sick child, but rather for the great mass of children who, though apparently well, are yet rarely found free from defect. The discovery of such defects at an early stage when they may be easily remedied by proper hygiene or medical care is the chief aim of the conference. No medical advice is given. If defects are found which need medical treatment, the mother is advised to consult her own physician or a specialist.

The conference physician enters on a special record sheet the result of his examination and a summary of his advice to the mother and gives her a copy of this record sheet.

Purpose of a children's health conference.—The primary purpose is educational.

1. It points out to the individual parents ways in which they may improve the care of their children. Held in connection with a child-welfare exhibit on the care of babies and young children, it makes clear the practical application of the principles shown in the exhibit.

2. It is also a practical demonstration to a community of the value of keeping the well child well by periodic physical examination of babies and young children. It corresponds to the medical inspection of school children. In communities where the latter is already established a conference brings to the attention of local physicians, nurses, and parents the importance of preventive measures in the earlier years of childhood.

such an epidemic is present, or where there is any special fear one, it is better to omit the conference altogether. In such cases the local or State public-health authorities should be consulted before a conference is arranged. At all times, even in the absence of any epidemic, great effort should be made to prevent the spreading of infectious diseases. This can be done if certain precautions are observed. Not more than two or three children, with the number of children. This can be accomplished if the appointments are by appointment only, the appointments being examined by appointment only, the appointments being advance. Not more than two or three children, with the should be admitted to the waiting room at the same time. been the experience in the past that when appointments are and the conference is a popular one, the conference room is times crowded with mothers and babies awaiting their turn of them, after remaining several hours, go home without satisfaction. It is obvious that such conditions are very undesirable. Moreover, children suffering from contagious diseases or have recently been exposed to them should not be eligible for a conference. This fact should be made known in all the material. In addition, a nurse should be given the duty, at the conference, of looking over every child as it is brought in and of excluding all those with any evidence of contagious disease, including

¹ For suggestions as to exhibits and other program features to be combined with a conference, see Baby-Week Campaigns (revised edition), pp. 73-85, 89-92. U. S. Children's Bureau Publication No. 15; also, Child-Welfare Exhibits: Types and preparation, pp. 8-13, 19-40. U. S. Children's Bureau Publication No. 14.

in the community. The chairman of this committee should act as treasurer and pay all bills upon order of the general chairman and executive committee.

Enrollment committee.—Upon the efficiency of this committee largely depends the success of the conference. It should consist of a chairman who is in charge of enrolling children for the conference and two members for each day of the conference.

As soon as the dates for the conference are decided upon the enrollment committee should furnish the publicity committee with the exact number of children whom it will be possible to examine in the given time, allowing not more than three an hour to each physician. It should be announced that any applicants in excess of this number will be placed upon a waiting list and substituted by the conference manager in the order of their application as vacancies occur.

The enrollment committee should decide upon a form of blank applications for enrollment and should see that a generous supply of such blanks, printed on cards of convenient size for mailing, is available for distribution by the publicity committee and others. This blank may follow the form shown in connection with the circular letter on page 6, except that the name and address of the chairman of the enrollment committee will be printed on one side of the card and the application to be signed by the parent on the other.

Such applications are referred to the enrollment committee and an appointment card similar to the one below is promptly mailed to each properly qualified applicant; a duplicate record is kept in an enrollment book ruled for the purpose.

Enrollment and appointment cards may be printed, typed, or mimeographed.

APPOINTMENT CARD.

Bring to on at
 (Name of child) (Place of conference) (Day) (Hour)

Be prompt or you will lose your turn.

If the child shows any sign of communicable disease, such as rash, sore throat, cold, inflamed eyes, etc., on the day of examination, or has been recently exposed to any contagious disease, do not bring him to the conference.

Bring a small blanket to wrap around the child while he is undressed, and a towel to place under him.

If unable to keep your appointment, notify chairman of this committee by telephone, mail, or messenger in ample time, so that the appointment may be given to another child.

(Name of Chairman)

Chairman Enrollment Committee.

(Address and telephone number at which chairman may be reached at all times.)

3. The conference may be a potent means of stimulating public interest in infant and child hygiene. The organization of infant-welfare or milk stations, establishment of a public-health nursing service either in the town or the country, etc., often follow the holding of such conferences.¹

Age limit of a conference.—The conference may be limited to children under school age—that is, any baby or child under the age of 6 years free from communicable disease may be considered eligible for the conference.

In some cases, especially in communities where it is desired to demonstrate the value of medical inspection of school children, children of all ages up to 14 years may be admitted for examination.

Safeguarding a conference.—The most important consideration in arranging a conference is to provide conditions which are safe and comfortable for the children.

The bringing together of a large number of children always involves a risk of spreading infection, which is especially great at the time of any general epidemic, such as one of measles, whooping cough, infantile paralysis, grippe, or any other contagious disease. Where such an epidemic is present, or where there is any special reason to fear one, it is better to omit the conference altogether. At any rate, in such cases the local or State public-health authorities should be consulted before a conference is arranged.

At all times, even in the absence of any epidemic, great care should be taken to prevent the spreading of infectious diseases at a conference. This can be done if certain precautions are observed. Every effort should be made to prevent the crowding together of a large number of children. This can be accomplished if the children are examined by appointment only, the appointments being made in advance. Not more than two or three children, with their mothers, should be admitted to the waiting room at the same time. It has been the experience in the past that when appointments are not made, and the conference is a popular one, the conference rooms are sometimes crowded with mothers and babies awaiting their turn; many of them, after remaining several hours, go home without the examination. It is obvious that such conditions are very undesirable.

Moreover, children suffering from contagious diseases or those who have recently been exposed to them should not be eligible for the conference. This fact should be made known in all the publicity material. In addition, a nurse should be given the duty, at the conference, of looking over every child as it is brought in and of excluding all those with any evidence of contagious disease, including bad colds.

¹ For suggestions as to exhibits and other program features to be combined with a children's health conference, see Baby-Week Campaigns (revised edition), pp. 73-85, 89-92, U. S. Children's Bureau publication No. 15; also, Child-Welfare Exhibits: Types and preparation, pp. 8-13, 19-46, U. S. Children's Bureau publication No. 14.

COMMITTEES AND PRELIMINARY WORK.

By securing the cooperation of the greatest possible number of organizations and individuals in the community, especially those interested in child welfare, the organizers of a children's health conference should endeavor to make it a community undertaking.

All committees should be organized as soon as possible after it is decided to hold a conference, as much of their work must be done before the conference opens.

The following committees and officers have been found useful in carrying out the work of the conference.

General chairman and executive committee.—All committees report to the general chairman, and the executive committee shares with the chairman the final responsibility in all matters of policy. It is well to have the committee representative but small.

Publicity committee.—To attain the object of the conference it is necessary that the community become thoroughly interested in it. Wide publicity is, therefore, the keynote of success. Special care must be taken in choosing the chairman of this committee, which should be large enough to be thoroughly representative of the educational and civic agencies of the community, both public and volunteer. Each committee member is held responsible for presenting the matter to his or her own group and enlisting its interest, and the chairman should require frequent reports from each member.

The chairman should appoint a subcommittee of two to act as press committee, with herself as ex officio chairman. It should be the duty of this committee to see that the conference receives ample notice in local newspapers, both before its opening and during its progress.

A good outline for press work is as follows:

1. A clear explanation of the object and method of the conference.
2. Articles setting forth the need, local and general, of such activities.
3. An application for enrollment appearing as an enrollment coupon in every issue of every paper.
4. During the conference a series of articles, stories, talks to mothers, descriptions of activities, of models, and of demonstrations, etc., in the daily papers, so written as to give local color and interest.
5. Weekly notes concerning the activities of each of the committees.

Various forms of publicity, other than press work, will occur to an ingenious publicity committee. Printed announcements may be read from all pulpits and in Sunday schools, explaining the purpose of the conference and the method of obtaining appointment cards. Similar announcements may be made by all school-teachers, and through their pupils a circular letter like the following may be sent to every parent within the radius to be reached.

KEEP THE CHILDREN WELL.

To mothers of young children:

If you have a baby or a child under — years you are invited to bring it to the children's health conference, to be held at (place), on (date).

Children will be examined by a competent physician, and the mother advised how to keep them strong and well.

Every child must be free from communicable disease, rash, sore throat, cold, inflamed eyes, etc., and must not have been recently exposed to any contagious disease.

Fill out the following blank application for enrollment, send it to the chairman of the enrollment committee, and an appointment card will be mailed to you.

.....

Mrs. (name printed),

Chairman of Enrollment Committee.

(Address).....

Please enroll in children's health conference to be held at (place), on (date), (name of child), who is months old, and send appointment card to


(Parent's name)

(Parent's address)

The exact form of the blank application for enrollment should be decided upon by the enrollment committee and should be uniform in all printed matter.

The letter may give in addition an announcement of the other program features, exhibit, meetings, demonstrations, etc., which have been arranged.

Another form of publicity is the window card displayed in all prominent stores, schools, post office, courthouse, railroad station, etc. A convenient size, 11 by 14 inches, may be attractively made up as follows:

CHILDREN'S HEALTH CONFERENCE.	
	(Place)
(Photograph of a healthy baby.)	
Examination of children under	
By appointment only.	
Address.....	
THERE IS NO WEALTH LIKE HEALTH.	

Finance committee.—This committee of three or five members will confer with the general chairman and executive committee as to the amount of money needed and will devise means of raising it. The necessary expense of conducting a health conference is very small. If, however, an exhibit and other activities are undertaken in connection with a conference, an increase in expense will be involved. Methods of raising money for the campaign should be worked out on the lines which experience has shown are practicable

in the community. The chairman of this committee should act as treasurer and pay all bills upon order of the general chairman and executive committee.

Enrollment committee.—Upon the efficiency of this committee largely depends the success of the conference. It should consist of a chairman who is in charge of enrolling children for the conference and two members for each day of the conference.

As soon as the dates for the conference are decided upon the enrollment committee should furnish the publicity committee with the exact number of children whom it will be possible to examine in the given time, allowing not more than three an hour to each physician. It should be announced that any applicants in excess of this number will be placed upon a waiting list and substituted by the conference manager in the order of their application as vacancies occur.

The enrollment committee should decide upon a form of blank applications for enrollment and should see that a generous supply of such blanks, printed on cards of convenient size for mailing, is available for distribution by the publicity committee and others. This blank may follow the form shown in connection with the circular letter on page 6, except that the name and address of the chairman of the enrollment committee will be printed on one side of the card and the application to be signed by the parent on the other.

Such applications are referred to the enrollment committee and an appointment card similar to the one below is promptly mailed to each properly qualified applicant; a duplicate record is kept in an enrollment book ruled for the purpose.

Enrollment and appointment cards may be printed, typed, or mimeographed.

APPOINTMENT CARD.

Bring to on at
 (Name of child) (Place of conference) (Day) (Hour)

Be prompt or you will lose your turn.

If the child shows any sign of communicable disease, such as rash, sore throat, cold, inflamed eyes, etc., on the day of examination, or has been recently exposed to any contagious disease, do not bring him to the conference.

Bring a small blanket to wrap around the child while he is undressed, and a towel to place under him.

If unable to keep your appointment, notify chairman of this committee by telephone, mail, or messenger in ample time, so that the appointment may be given to another child.

(Name of Chairman)

Chairman Enrollment Committee.

(Address and telephone number at which chairman may be reached at all times.)

Children should be enrolled in the order of application unless the convenience of parents requires a special hour. For instance, people living at a distance should be given a time in the middle of the day; also in small towns it has been found well to reserve one or two hours every day for country people who may not know that an advance appointment is necessary. Any portion of this time not needed for country people may be filled from the waiting list, so that no period is wasted.

Suggested form for enrollment book.

No. of entry.	Name of child.	Name and address of parent.	Age in months.	Day of appointment.	Hour.
1	John Doe, jr. . .	John Doe, 95 Monroe Street.	20	Monday..	9
2	.....	.....	.....	.....	9. 20
3	.....	.....	.....	.....	9. 40
4	.....	.....	.....	.....	10

The chairman of the enrollment committee must have a schedule carefully worked out for the entire conference and should know each night that she has two dependable assistants for the next day. One of these serves as conference manager and is responsible for all details of the day. To her must be reported any complication, such as lack of service or equipment. The other member assists her in every possible way, serving especially as hostess in the undressing room. Her duties will be described later.

As it is necessary for two members of the enrollment committee to be on duty each day of the conference, it simplifies matters, especially in a small conference, for them to be responsible for the daily ordering of many details which would otherwise belong to the committee on place and equipment. Among these are the light, heat, ventilation, decoration, janitor service, laundry, and supplies for the conference, furnished by the committee on place and equipment.

Committee on place and equipment.—This committee should arrange with the general chairman for a suitable building, such as the public library, woman's club, courthouse with public rest rooms, school building, or other available public rooms. One of these is usually available and may be easily adapted to the purpose.

Spectators will be deeply interested in watching the examinations. However, the conference, to be valuable to the mother and safe for the child, should be as nearly as possible like a consultation in the physician's private office. These conditions may be approached by separating the spectators from the examination room. One method

is described below; others may be devised. When no adequate provision can be made for this, it is better to exclude visitors altogether.

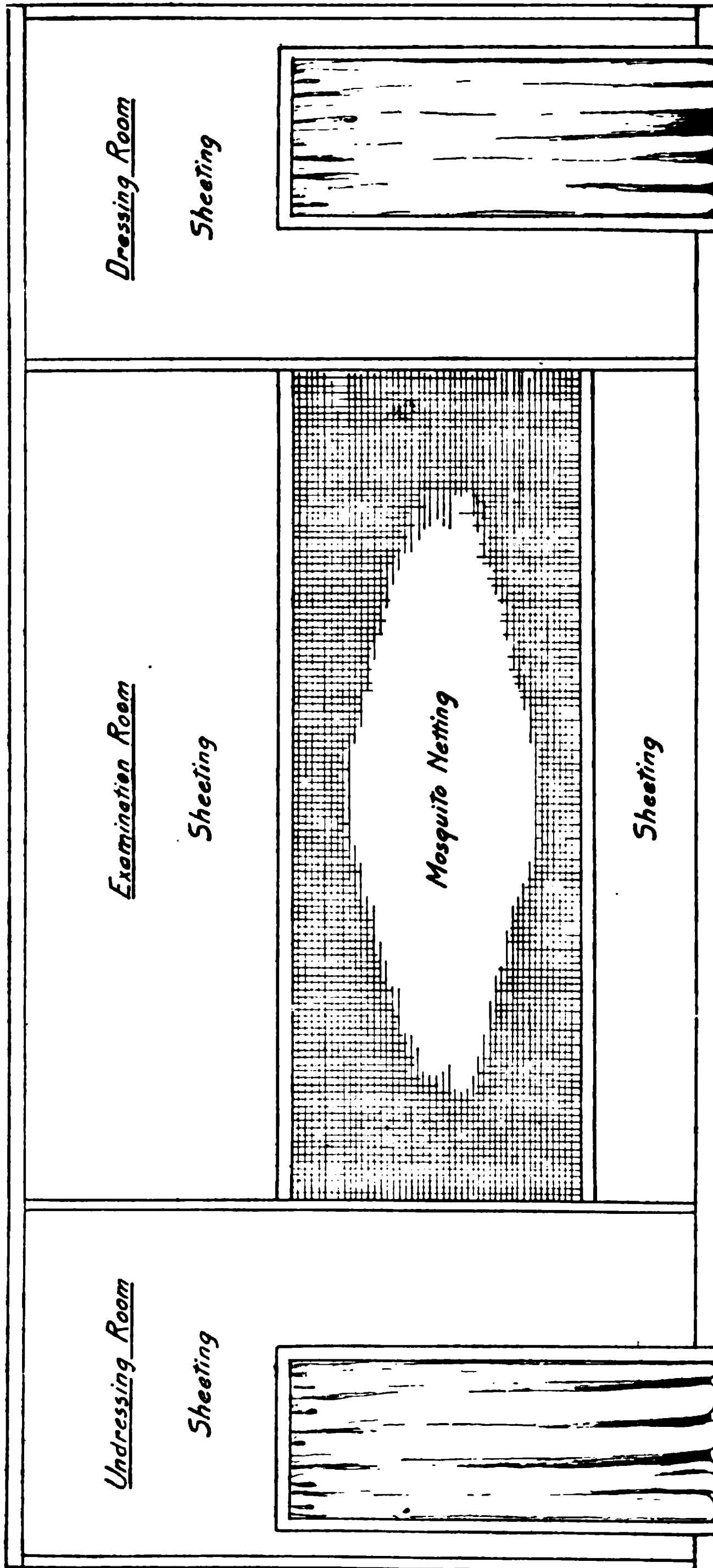
If an exhibit is held in connection with the conference, more commodious quarters are required, as wall space for panels, charts, etc., and floor space for models and demonstrations. For the conference proper, small adjoining rooms may be used, or the end of the exhibit room may be temporarily divided off by curtains or screens into the necessary compartments. If the exhibit room has a stage, this may serve for the conference provided the necessary compartments and waiting room can be arranged. The stage itself may be long enough to allow space for the undressing room, the examination room, and the dressing room. The space to be used for the conference, whether on the stage or on the floor level, may be inexpensively partitioned to provide the necessary rooms. In half a day a carpenter of ordinary ability can put up a scaffolding of rough lumber (2 by 4), building it 7 or 8 feet above the level of the floor. The upright studs should be so placed as to have an entrance way into each room. These entrances should be hung with sheets and the entire wall space—front, back, and partitions—should be covered by sheeting, except a horizontal space 2½ to 3 feet across the front of the examination room. This should be covered only by white mosquito netting, fastened neatly to the sheeting along its upper and lower borders and at both ends. (See illustration.) This allows the public seated quietly in front to watch the examinations. Under no circumstances should crowding be allowed in front of the stage, nor should any disconcerting noise to frighten the children be tolerated.

The sheeting above the netting and at either end where the dressing and undressing rooms are closed in makes an excellent background for charts or diagrams, or for an exhibit of children's clothing, which the audience may discuss while waiting for the conference hours.

The waiting room.—This room must have toilet facilities, and drinking water with sanitary cups. The following equipment is needed: A suitable number of chairs, large and small; table for literature; table for nurse in charge, which should be placed at main entrance. This should hold a tested clinical thermometer in a tumbler of antiseptic solution, a roll of cotton, and a few wooden tongue depressors in a clean dish or glass.

The undressing room.—This must contain two or three chairs and a table for the large paper milliner's bags, one of which is given to each mother for her child's clothing. There should be also a stock of outing flannel squares (1½ yards) to wrap around such children as are unprovided for.

The examination room.—This room should be light, airy, free from drafts, and well ventilated. It should be at least 10 by 30 feet; a larger room is better. No one is admitted to this room except the



Suggested Arrangement for Conference

working force, the child to be examined, and one or both parents. An examination table and chair for the examining physician should be provided. An ordinary deal table 45 inches long is perfectly satisfactory; it should be covered with a pad or folded quilt, an oilcloth, and a cotton sheet. This in turn should be protected by a fresh towel for every child. There should be also a small table or desk for filling out the records. A folding screen should be provided for any child who is old enough to feel embarrassed by the spectators, or for the private examination of genitals when the mother requests such examination. There should be facilities for washing hands, an enameled basin of antiseptic solution for the hands of the examiner and one for toys, a supply of paper towels and of wooden tongue depressors, a covered glass jar to hold them, and a wastebasket for used towels and depressors. The tongue depressors must be broken immediately after use. There should be a supply of sheets and flannel squares for emergencies. Toys should be provided to amuse frightened children; but to avoid any possible spread of contagion from one child to another, it is advisable, if possible, to provide a new inexpensive toy for each child examined. These may be donated; they will add somewhat to the expense of the conference if they must be purchased. If used repeatedly they should be such toys as strings of heavy glass beads or celluloid articles which can be quickly and easily disinfected after each use. Two or more chairs should be provided for parents and for other children in case it should be necessary for the mother to bring more than one.

Measuring and weighing equipment.—Two standard scales must be provided, one with scalepan for babies and the other with platform and measuring rod for older children. Both scales should be tested for accuracy before they are used. An apparatus for measuring babies and young children may be made by nailing a headboard firmly across one end of the examination table. To this board attach one end of a linen tape measure and secure the other end firmly across the sheet which covers the table. Provide also a book end of the cheap enameled kind sold for office use.

Special equipment.—Besides the general furnishings described above there should be provided a stethoscope (most examiners will prefer to use their own), a pocket flash light with reserve batteries for examination of throats, a goodly supply of tape measures and of bichloride tablets, a clinical thermometer for the use of the nurse in the waiting room, wooden tongue depressors, and a liberal allowance of stationery, clips, hard pencils, a pencil sharpener, pens, ink, etc.

It may not be amiss to mention the matter of laundry, which may easily become a large item of expense and for which provision must be made.

An ample supply of record sheets which are used instead of score-cards in this type of conference must be provided. Record sheets

similar to those which have been used by the Children's Bureau in a number of conferences may be obtained from the Council on Health and Public Instruction of the American Medical Association, 535 North Dearborn Street, Chicago, Ill. In sending orders, mention should be made of the fact that record sheets, not score cards, are desired. A copy of this record sheet filled out for a typical case is given on page 17 of this pamphlet. Two copies of each record sheet should be made; one is to be given to the parents, the other preserved as a record for the examiners. The Children's Bureau will be glad if conference committees will send to the bureau, for study and tabulation, copies of the record sheets which have served their purpose locally. Two copies may be made at the same time if a piece of carbon paper is laid between two record sheets and a sharp-pointed pencil is used in filling out the record. A supply of sheets of new carbon paper of the kind made especially for use with lead pencil should be on hand. A supply of anthropometric tables (see p. 19) should be obtained from the American Medical Association for the use of examiners.

Where the conference is fortunate enough to have the services of a dentist, it may be necessary to provide a small table for his use unless, as is often the case, the local dental society wishes to install its own chair and equipment.

The examination room should present a very neat appearance at all times and should be carefully cleaned and arranged each evening after the close of the conference. Sheets can be used to cover objectionable walls or immovable articles. Windows should be bright; if possible a few growing plants or flowers should be included in the equipment.

Committee on examiners and assistants.—A committee on examiners, appointed by the local medical and dental society, may call for volunteers, or each society may appoint an adequate staff for every day of the conference. Usually a half day's service is as much as can rightfully be asked of a busy practitioner.

Another plan is for the committee to be composed of local women who interview physicians and dentists within their conference radius, soliciting their assistance and getting from each a statement as to the days and hours he or she would like to serve. In similar ways an adequate corps of nurses may be secured to assist in making the examinations, allowing two and if possible three nurses for each half day. Each doctor, dentist, and nurse should agree to furnish a substitute if, for any reason, the appointment can not be kept.

While it is manifestly unfair to impose upon doctors, dentists, or nurses, yet they have always been found interested in the examinations and will often be willing to have their names placed on a reserve list for further service. This list should be on file with the conference manager for use in an emergency.

The staff for each day consists of:

1. Examining physician, preferably a children's specialist.
2. First assistant nurse to aid in making the examinations. She must be quiet, swift, and skillful in handling children.
3. Second assistant nurse, who is on duty in the waiting room, where she makes a preliminary examination of each child.
4. Clerical assistant, who is preferably but not necessarily a nurse. A swift, level-headed woman may serve satisfactorily.

It is a great advantage to have the assistance of a dentist, especially if older children are examined.

Space permitting, and the demand being sufficiently great, this staff may be doubled. In that case one long examination table instead of two short ones may be used to advantage; the scale with pan for babies should be placed in the middle of the table, convenient to both examiners; each physician makes his examination at an end of the table instead of at the side. Each doctor must have his own nurse and clerical assistant and their desks are placed at opposite ends of the room.

It greatly facilitates the conference to have as few changes as possible in the staff. A system of rotation should be arranged so that not more than one new assistant is taken on in any one day.

A schedule of the medical staff should be arranged in advance, covering every day of the conference as completely as possible. A form like the following has proved practicable:

Day.	Hours.	Physician.	Dentist.	Nurses.
Monday...	9-12	Dr. E. R. Black...	Dr. W. T. Ray...	Miss Amhurst. Miss Gray. Mrs. Smith.
	2-5	Dr. G. Crosby....	Dr. J. S. Conn....	Miss Amhurst. Miss Gray. Miss Black.

Committee on general program.—This committee arranges for such programs and exhibits as may be decided upon by the executive committee. Suggestions will be found in the bulletins on Baby-Week Campaigns and Child-Welfare Exhibits, mentioned on page 4.

Literature committee.—This committee should obtain a supply of literature for distribution and have this displayed on a table in a convenient place, with a member of the committee always in attendance to give it out with discrimination.¹

¹ For a list of sources from which literature for distribution may be obtained, see Baby-Week Campaigns (revised edition), pp. 118-131. U. S. Children's Bureau publication No. 15.

Committee on follow-up work.—This committee should hold a meeting with the executive committee at the close of the conference with a view to establishing follow-up conferences at stated intervals, so that mothers may be encouraged and helped to secure the definite and lasting results indicated at the initial conference. These may be conducted in a simpler, more private way than the original conference. Once a year, perhaps, the original conference may be repeated and the records compared with those of the previous year.

Other forms of follow-up work especially appropriate for children's health conferences are:¹

1. The establishment of infant-welfare stations.
2. The establishment of a public nursing service.
3. The establishment of rest room for women and children, which may form the nucleus of a center for maternal and child welfare. A county center of this kind may be established at a county seat.
4. Establishment of medical inspection in the schools.

CONDUCTING A CONFERENCE.

The success of the conference depends largely upon the promptness, precision, and smoothness with which all details are carried out.

The committee on equipment must see to it that all equipment is in place the night before the conference begins.

Two members of the enrollment committee, the examining physician, and his three assistants must be present continuously at the conference.

Only one child can be examined at a time, and, even under the best conditions and with expert assistants, not more than three children can be examined in an hour by one physician. Failure to meet appointments promptly is unfair to the busy physician who is contributing his time and service and equally hard on a baby who is kept waiting so long that he grows tired and irritable.

The hours for the conference will be arranged to suit local conditions, but if 9 to 12 and 2 to 5 are chosen it means that the examining staff and the mother and baby with the 9 o'clock appointment must be there long enough before that hour so that the actual examination begins at 9 o'clock; and the same applies at noon. The 12 o'clock appointment will not conclude until 12.20, and the appointment card of the 2 o'clock applicant must be filed before the hour and the child prepared for examination at 2 o'clock. In fact, the interval between 12.30 and 1.30 is a busy one, unless the conference quarters are exceptionally well arranged. Supplies must be renewed and used ones disposed of. The rooms must be put in order, thoroughly

¹ For other suggestions on follow-up work, see *Baby-Week Campaigns* (revised edition), pp. 64-67, 94-99. U. S. Children's Bureau publication No. 15.

ventilated, and then made warm enough for the children to be undressed.

The mother and child are received by the conference manager who serves as hostess of the day. She verifies the appointment, files the appointment card, and directs the mother and child to the waiting room in order of their appointment, admitting only as many as can be comfortably seated. She controls the stream of applicants which must be kept quietly but steadily progressing.

The nurse on duty in the waiting room questions the mother tactfully as to any possible communicable disease to which the child has been exposed. In suspicious cases she examines the throat and takes the child's temperature. If in her judgment the child can be admitted safely she records his past history on the left page of the record sheet and sees that the mother takes the record sheet with her when she and the child go to the undressing room.

The hostess of the undressing room, as stated before, is a member of the enrollment committee. She receives the mother and child after the preliminary examination in the waiting room. She gives the mother a bag for the child's clothing, assists in undressing the child, and makes herself generally useful. She must see that the record sheet and bag of clothing accompany mother and child as they leave her room for the examination. She must also be custodian of lost articles until reclaimed by the mothers. And she must preserve order and quiet in the undressing room at all hazards. Upon her tact and resourcefulness largely depends the success of the conference. Her reassuring tone and manner will send the child to a trying ordeal feeling friendly and happy instead of panic stricken.

SUGGESTIONS FOR MEDICAL EXAMINERS AND ASSISTANTS.

The physician should undertake this work with the point clearly in mind that the conference is not a clinic and that gratuitous medical advice is not permissible.

The physician is supposed to give a physical examination with full report and explanation of the child's condition to the mother and detailed advice as to what *she* can do for the child. The examiner must remember that he is educating the mother and not treating a patient. He will be successful in this to the degree in which he is able to apprehend her difficulties and fit his advice to her individual case. Examiners are urged to remember the fact that in filling out records they are neither writing prescriptions nor instructions to nurses, and that the average mother, if given technical or general directions which she does not understand, will not be helped. The suggestions, to be of any value, must be simple, concrete, constructive, and easily intelligible to the mother. Moreover, in making them the

examiner must take into account the financial condition of the family. He should also be familiar with the foods available in the mother's locality, that he may advise her accordingly.

It is important for examiners and nurses to make friends with each child before beginning the examination. He has a right to resent his present predicament, and they will wisely assure him of their friendly intentions.

Filling out the record sheets.—The record sheet is a simple folder, on the outside of which a space is left for the name of the child. On the inside, the left-hand page is divided into four columns, two alternate columns containing the names of organs or tissues and two left blank. In the narrow blank columns all normal organs or tissues are marked ✓ and all those found defective, ×. In order to make sure that nothing has been overlooked, the examiner must see that the space opposite each item contains one of these marks. The wide spaces following the individual items are used for recording the child's early history and his present weight and measurements; an explanatory word concerning the organ or tissue marked defective is added when necessary.

The right-hand page is left blank for helpful suggestions which the examining physician will write for the mother's benefit. These suggestions must be numbered to correspond with the organ or tissue to which they refer.

SAMPLE RECORD SHEET.

Names of parents, *Mr. and Mrs. John Smith.*

Address, *439 Fifth Street.*

✓	1. Male; Female	✓	14. Mental development.....
✓	2. Age: <i>2 years.</i>	.....	.....
✓	3. Weight at birth: <i>8½ pounds.</i>	✓	15. Nervous system.....
×	4. Breast-fed exclusively: <i>6 weeks.</i>	.....	.....
×	5. Partly breast-fed: <i>6 weeks.</i>	×	16. Fat: <i>Deficient.</i>
×	6. Age when weaned: <i>3 months.</i>	×	17. Bones: <i>Poorly formed.</i>
×	7. Why weaned: <i>No milk.</i>	×	18. Muscles: <i>Soft.</i>
×	8. Early feeding: <i>Condensed milk.</i>	✓	19. Skin.....
×	9. Present feeding:	✓	20. Hair.....
.....	<i>Family diet.</i>	✓	21. Eyes.....
.....	10. Previous illnesses (with age):	✓	22. Ears.....
✓	Measles.....	×	23. Nose: <i>Poorly developed.</i>
×	Whooping cough, <i>18 months.</i>	✓	24. Mouth.....
✓	Respiratory diseases.....	×	25. Teeth: <i>Deficient.</i>
.....	.....	✓	26. Tonsils.....
.....	Digestive diseases:	×	27. Adenoids: <i>Present.</i>
×	Cholera infantum, <i>10 months</i>	✓	28. Glands: <i>Enlarged.</i>
✓	Other diseases.....	✓	29. Heart.....
.....	.....	✓	30. Lungs.....
.....	.....	✓	31. Liver.....
.....	.....	✓	32. Spleen.....
.....	.....	×	33. Ext. genitals.....
×	11. Weight: <i>25 pounds 10 ounces.</i>	.....	34. Extremities: <i>"Bow legs."</i>
×	12. Height: <i>34 inches.</i>	.....	.....
×	13. Dimensions of head: <i>20 inches.</i>	.....	.....
×	Chest, <i>19 inches.</i> Abdomen, <i>21 inches.</i>	.....	.....

SUMMARY.

8. He would probably have developed better on breast milk than artificial food. **Cows' milk** modified under a doctor's direction is the best substitute for breast milk.

11 and 12. He is over height but under weight, and chest expansion is not as good as it ought to be. He needs an out-of-door life.

16 to 18. He is too thin, his muscles are soft, and his condition shows that he needs careful feeding at regular hours. Give him milk, weak cocoa, eggs, beef juice, soup or broth, or a little scraped beef lightly broiled. He should have fruit juice, fruits stewed and mashed fine, and such vegetables as spinach, celery, carrots, or asparagus, boiled and rubbed through a sieve. Give also stale bread, toast, or zwieback.

23 to 27. He has pinched nostrils because adenoids are present and prevent proper breathing. This may prevent his growing into a strong, healthy boy and may retard his mental development. He must be examined by a throat specialist.

25. Teeth are slow in developing. Foods named above will make better teeth and bone. Keep his teeth clean.

28. The glands of his neck are enlarged. Would urge an examination by your family physician. Ask him whether your dairy is clean and safe.

A few summaries from other typical record sheets are given below as suggestions to the busy physician of the simple character of the advice mothers have found helpful when studying the record sheet.

This little girl is a credit to an intelligent mother and shows the advantages of breast feeding. She is well developed, in good proportions, and seems in fine condition.

Keep her so by an out-of-door life, regular habits, simple, wholesome food. No eating between meals, no late hours nor motion-picture shows, no crowding in school work.

Her teeth need her constant care and the oversight of a dentist. Decaying teeth mean decomposing food and indigestion.

This baby is thin and poorly nourished. He shows that he is not getting the right kind of food. Don't waste your time and his strength experimenting. Take him to a good children's specialist and follow his directions.

He is also overclothed. The band is no longer necessary; it is full of wrinkles and very uncomfortable. Pin his shirt to diaper; also his stockings, which should be long enough to cover entire leg. He may need the short sack night and morning, but don't let his body get wet with perspiration, as it makes him susceptible to colds.

Change all clothing at night and air thoroughly. He ought to sleep only in shirt, diaper, and gown (flannelette in winter and muslin in summer). If he can sleep in a protected corner of the porch he will become less susceptible to colds. In that case make sleeping bags, only drawing in sleeves with draw string in winter to keep his hands warm.

This is a tiny baby and needs breast milk. Try to get your own health in better condition, so that your milk will not give out. Drink milk and cocoa instead of tea and coffee, eat only simple, nourishing food, have a nap on the porch every day while the baby is asleep, and make up your mind to nurse him six months anyway. You can if you will.

Four-hour intervals will be better both for your baby and yourself.

Your doctor will help you when he sees that neither of you is in good condition.

James is a big, well-built boy, has good color, and seems in fine condition, except for his knees, which are too prominent, and his ankles, which are big and bulging on the inner side. He may have walked before his ankles were strong enough to bear his weight or his food may not have contained the right elements.

He needs careful feeding and special care to prevent a permanent malformation of the ankle and a flattened arch of the foot. Would suggest the advice of a good orthopedist in selection of his shoes and to give him any possible preventive care.

Abram is suffering from faulty feeding. His bow legs and roughened, flaring ribs show that his bones are not developing well, and his teeth are slow in coming, because he needs a food with more bone-producing material. Cows' milk is more like mother's milk than the manufactured food you are using. He needs a little orange juice every day. Take him to a milk station, where you will receive help in securing the best possible food for your baby.

Baby Blank seems to be a happy, well-nourished baby. She weighs more than the average child of her age, but has rather more fat than muscle. Her abdominal measurement is greater in proportion to her chest and head than is considered normal. This is probably due to distention of the intestines.

Wheat cereal, bread, and potatoes are more starch than she needs. Don't give potato under 14 to 16 months. Try strained oatmeal, cooked slowly for two hours, instead of wheat cereal, for her constipation. Give also pulp of stewed apples, peaches, or prunes every day in addition to the orange juice. A tablespoonful of beef juice squeezed from a bit of lightly broiled round steak is better for a child of her age than so much starchy food.

Teach her habits of regularity in order to overcome her constipation.

Weights and measurements.—An anthropometric table giving the weights and measurements of the normal child from 6 to 42 months can be obtained from the Council on Health and Public Instruction of the American Medical Association, 535 North Dearborn Street, Chicago, Ill. A number of these tables should be obtained for the use of examiners. In Child-Welfare Exhibits, Children's Bureau publication No. 14, page 54, will be found a table of weights and measurements of normal children from birth to 16 years. The figures for children from 6 months to 3 years are taken from the table mentioned above; the other figures are those given by L. Emmett Holt in *Diseases of Infancy and Childhood*, page 20. The weights for children of 5 years and over include the weight of clothing. This does not mean that every child should be expected to conform exactly to the averages for his age. The average of a large number of children of a given age does, however, present a picture of a symmetrical, normal individual, and is of some assistance in making comparisons. An easy way to make the comparison is to draw a pencil under the average measurements for the given age, then note the actual measurements of the child, wherever found on the anthropometric table. If a child has well-proportioned measurements of head, chest, and abdomen he may be either shorter or taller than the average and still be normal.

The most important things to bring to the attention of the mother are those which she may improve; e. g., if a child has a small chest circumference in proportion to his other measurements, she should be directed to endeavor to increase it. If the abdomen is too large, she should give particular attention to diet and elimination. Discrepancies in weight should be noted, as they often indicate excessive, deficient, or unwise feeding.

The child is entitled to every consideration compatible with accuracy, and the skillful examiner will avoid all undue handling and manipulation. The child to be examined is taken by the nurse from the mother and weighed; if he is old enough to stand, the weighing is done on the platform scale, when the height is also secured on the measuring rod. Babies must be weighed in the scalepan. The length of the baby may be swiftly and accurately found by laying him

upon the examination table, directly over the tape-measure, with his head resting firmly against the headboard. Press the enameled book end squarely against the feet and read his length as indicated upon the tape measure. Other measurements are then made with the child lying or standing, not sitting. The head is measured around the largest circumference, the chest around the nipple line, and the abdomen on a line with the umbilicus.

Mental development.—It is impossible in this type of conference work to give the child the quiet and privacy necessary for an accurate examination of his mental development. The careful physician will, however, bear in mind the child's ability as compared with that of the normal child, and in case of any doubt he must urge the mother to secure a more thorough examination than can be given at the conference.

Nervous system.—The statements made in regard to mental tests apply also to the examination of the nervous system. The necessary element of strangeness and the unaccountable circumstances may place the child at a disadvantage unless he has an exceptionally well-balanced or a phlegmatic temperament. However, the physician may satisfy himself if the child seems unduly high strung, irritable, or hysterical. In this case the mother should be questioned closely as to the child's habits. Has he regular hours for eating, sleeping, bathing, etc.? Does he have a nap every day? Does he sleep in the fresh air day and night? Is he kept away from noise, crowds, and excitement?

Physical examination.—The method in which this examination is carried out will vary with different examiners, but the following order has been found convenient:

General inspection.—After securing weight and measurements, the nurse places the child upon the examination table and the physician will observe its general appearance and proportions, calling the mother's attention to any gross deviations from the normal, such as faulty posture, mouth breathing, color and condition of skin, general nutrition, evidences of rachitis, distended abdomen, etc. He will note also any lack of symmetry of head, eyes, ears, shoulders, spine, hips, ankles, etc.

Fat.—Mothers are often misled by the apparently well-nourished condition of babies fed on manufactured foods. Their attention should be called to the fact that a fat child is not necessarily a well-nourished child. He may be much overweight and yet his bone, muscle, skin, and teeth may show evidence of poor nutrition. Even in older babies this accumulation of fat may often be the result of a too starchy diet and the mother should be given a list of fruits, vegetables, and proteid foods suitable for a child of this age.

Bones.—The physician should make the most of this opportunity to show the mother the relation between feeding and bone development, beginning with the fontanel, roughened sutures, beaded ribs, curvature of spine and of long bones, thickening of articulations, poorly developed ankles, etc.

Muscles.—The musculature of a young baby is not easy to gauge, but his grasp, the strength and eagerness of response to pressure against hands and feet, his pulling power, etc., may be ascertained. And in the older child posture, symmetry, and resistance are all an indication of muscular development. The physician should see also whether any paralysis exists. The mother should be shown whether muscles are firm or flabby and instructed in the selection of food for her child.

Skin.—The skin and mucous membranes will often indicate an anemic state, and any roughness, redness, or eruption requires investigation. Many young mothers need advice as to how to keep the baby's scalp free from crust.

Hair.—The condition of the hair is often related to that of skin, nails, and general nutrition. Moreover, the physician should always be on the alert, especially in the case of older children, for alopecia due to ringworm or other causes. Many mothers do not appreciate the importance of early medical care in such cases.

Eyes.—Without the aid of a specialist no detailed examination of the eyes is attempted. The examiner has noted upon general inspection any unusual position, as in certain oriental and psychiatric types. He must satisfy himself that the baby can see; that he is free from strabismus, ptosis, or inflammation; that there is no discharge other than tears. The mother may be questioned as to the use of "drops" in his eyes at birth. The importance of this precaution should be stressed.

Ears.—Lack of symmetry has already been noted. Ears must be tested for hearing, tenderness, or discharge, and mothers cautioned against using any medication without the advice of a physician.

Nose.—The examiner has observed whether the child breathes through his nose or through his mouth. Any stenosis or obstruction should be called to the mother's attention, and if necessary she should be shown how to cleanse the nostrils gently.

Mouth, teeth, and throat will be reserved for the last, as their examination constitutes the only justifiable cause for crying.

Glands.—Enlarged glands must be sought in neck, axillae, and groin, and their cause and significance explained to the mother, especially their relation to decayed teeth, to infections of the throat, ears, and head, and to tuberculosis.

Chest.—The poorly built chest, barrel shape, pigeon breast, or depressed sternum were noted on general inspection and again in

observing bone development, as were also the presence of rosary, flaring ribs, or other evidences of rachitis. With the child sitting on the table, squarely in front of him, the examiner now carefully examines the heart and lungs by percussion and auscultation. Heart murmurs are especially noted.

Abdomen.—This should be examined for abnormal depression or distention; in case a distended abdomen is found the mother is urged to feed her child only at regular hours and under the guidance of a physician.

The liver should be outlined; it should be remembered that this is palpable in the normal young child. The spleen, on the other hand, is not demonstrable in the normal healthy child.

Hernia, both umbilical and inguinal, should be looked for; if present, advice should be given.

Extremities.—Extremities must be examined for absolute and for comparative development; the symmetry and strength of feet and ankles should be especially noted. Mothers must be cautioned against the common custom of urging children to precocious accomplishments such as standing or walking at an unduly early age.

Mouth, teeth, tonsils, adenoids.—The examiner will dip his hands in the bichloride solution, dry them carefully, and examine, in a good light or with the aid of a pocket flash light, the development and condition of the child's mouth, teeth, and throat. This is of sufficient importance to warrant a thorough inspection even at the expense of arousing a child's resistance. If the blanket is wrapped securely around his arms and his head held firmly against the nurse's chest, the examination is greatly facilitated. Mouth breathing, if present, has been called to the mother's attention during the general inspection. It is well, in some cases, to show her the cause or, in others, to urge that the child be taken to a specialist.

The color and condition of the mucous membrane and of the gums must be noted, and especially the condition of the teeth, as few mothers realize the importance of their prophylaxis.

External genitals.—At the request of the mother the external genitals of the child may be examined behind a screen for phimosis, irritation, or discharge. The mother should be instructed in the importance and the means of keeping the parts clean and in the need of teaching the young child habits of cleanliness.

This completes the examination, and, while the examining physician finishes the record by writing practical suggestions for the improvement of the child, the nurse prepares for the next examination.

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Miscellaneous Series:

- No. 1. The Children's Bureau: A circular containing the text of the law establishing the bureau and a brief outline of the plans for immediate work. 5 pp. 1912. Bureau publication No. 1. (Out of print.)
- No. 2. Birth Registration: An aid in protecting the lives and rights of children. 20 pp. 3d ed. 1914. Bureau publication No. 2.
- No. 3. Handbook of Federal Statistics of Children: Number of children in the United States, with their sex, age, race, nativity, parentage, and geographic distribution. 106 pp. 2d ed. 1914. Bureau publication No. 5.
- No. 4. Child-Welfare Exhibits: Types and preparation, by Anna Louise Strong. 58 pp. and 15 pp. illus. 1915. Bureau publication No. 14.
- No. 5. Baby-Week Campaigns (revised edition). 152 pp. and 16 pp. illus. 1917. Bureau publication No. 15.
- No. 6. Maternal Mortality from all Conditions Connected with Childbirth in the United States and Certain other Countries, by Grace L. Meigs, M. D. 66 pp. 1917. Bureau publication No. 19.
- No. 7. Summary of Child-Welfare Laws Passed in 1916. Bureau publication No. 21. (In press.)
- No. 8. Facilities for Children's Play in the District of Columbia. Bureau publication No. 22. (In press.)
- No. 9. How to Conduct a Children's Health Conference, by Frances Sage Bradley, M. D., and Florence Brown Sherbon, M. D., 24 pp. 1917. Bureau publication No. 23.



U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

A SOCIAL STUDY OF MENTAL
DEFECTIVES IN NEW CASTLE
COUNTY, DELAWARE

BY

EMMA O. LUNDBERG

DEPENDENT, DEFECTIVE, AND DELINQUENT CLASSES SERIES No. 3

Bureau Publication No. 24



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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, January 22, 1917.

SIR: Herewith I transmit the report of a study made by the Children's Bureau into the social conditions and needs of mentally defective persons in New Castle County, Del. This study was undertaken at the request of the Delaware Cooperative Educational Association. It is part of a general survey of educational and social needs in Delaware, in which the Bureau of Education and the Public Health Service also have engaged.

The report affords general evidence as to the social injury and personal suffering caused by the presence in any community of mentally defective persons who lack suitable care. The conditions found in Delaware are of nation-wide interest because they are typical of large areas of this country in which there is no adequate provision for the protection of the feeble-minded.

The Public Health Service cooperated in this inquiry by placing at the disposal of the Children's Bureau the results of the mental examinations of school children in New Castle County made by Dr. E. H. Mullan.

This study was made under the direction of Miss Emma O. Lundberg, who prepared the report with the assistance of Miss Katharine F. Lenroot. The field work was done by Miss Cyrena V. Martin, Miss Marion Schaffner, Miss Ethel M. Springer, and Miss Nellie M. Quander.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

Hon. WILLIAM B. WILSON,
Secretary of Labor.

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A SOCIAL STUDY OF MENTAL DEFECTIVES IN NEW CASTLE COUNTY, DEL.

PURPOSE AND METHOD OF STUDY.

No State has as yet made adequate provision for mental defectives. In considering how best to meet the need for increased care and protection it is coming to be recognized that the problem is a complex one which can not be solved by any one measure. The adequacy of the care and protection which can be given a mentally defective individual in his own home depends upon the economic circumstances and character of the family. Furthermore, mental defectives vary as to the kind of care and training and the amount of supervision needed. Public provision for the care and protection of mental defectives is urgently needed for two classes:

1. Those who are delinquent, degenerate, or uncontrollable and thus constitute a menace to the home, school, and community.
2. Those who are deprived of normal home life or whose families can not give them the necessary care and protection.

The Children's Bureau undertook an investigation in New Castle County, Del., for the purpose of securing social data in regard to the conditions under which mental defectives live, the problems involved in the lack of proper facilities for their care, and the extent of the need for public supervision and institutional provision. The Children's Bureau made no examinations of mentality, but used as a basis for social investigations the results of mental examinations made available by the Public Health Service and diagnoses by other physicians competent to determine mentality. The investigation was begun in the fall of 1915, and the field work was completed in July, 1916.

The only provision in Delaware for the care and training of mental defectives is the State fund for the maintenance of 14 Delaware children in the Pennsylvania Training School for Feeble-minded Children at Elwyn, Pa. An effort is being made to secure more adequate provision in the State.

The population of Delaware according to the estimates of the Bureau of the Census for July 1, 1916,¹ was 213,380. New Castle County, the northern of the three counties of the State, had an estimated population of 131,670. The population of this county has increased very materially since 1910, owing to the unusual industrial conditions of the past two years. The county includes Wilmington, the only large city in the State, which, according to the census esti-

¹ Bureau of the Census Bulletin No. 133, p. 15.

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mates for 1916, had a population of 94,265. There are a number of small towns in the county, the largest of them having a population of about 4,000. Seventy-four per cent of the population in 1910 was urban (living in cities of 2,500 or more). Part of the county is practically suburban to Wilmington or to Pennsylvania cities.

The population of New Castle County, as well as of the State as a whole, is chiefly native white. In this county, according to the 1910 census, 74.2 per cent of the population were native white, 13.1 per cent were foreign-born white, and 12.7 per cent were colored. Within the last two or three years the population of the county has become more heterogeneous through an influx of foreign laborers.

New Castle County has large industrial establishments. Manufacturing is carried on in the smaller towns as well as in Wilmington. Agriculture, especially dairying, is an important occupation. Conditions in this county are very different from those prevailing in the southern part of the State, where the population is almost entirely rural and the raising of fruits and vegetables is the principal industry.

In preparation for an intensive study of individual defectives a rapid survey was made of social agencies and institutions and general social conditions of the State. Information was secured in regard to existing resources for dealing with the problems of defect, dependency, and delinquency, including utilization of facilities of other States.

A list of supposed mental defectives in New Castle County was secured through the cooperation of all institutions in the State having inmates who came from this county, social agencies of all kinds, public and parochial schools, county and State officials, workers dealing with problematic children, and private individuals in all parts of the county having special knowledge of conditions. Only persons in the county at the time of the investigation and those who were temporarily away from home but whose families lived in the county were included in the study. Inmates of institutions in New Castle County admitted from outside the county were not included.

In order to determine which of the individuals reported were definitely defective, diagnoses were secured for as many of the cases as possible. The mental examinations of school children in New Castle County made by the United States Public Health Service materially aided in this.¹ These examinations covered all children in the schools of New Castle County outside of Wilmington and a selected list of Wilmington school children. A considerable number of mental defectives studied were or had been formerly inmates of the Delaware Hospital for the Insane, or had been under observation of hospitals and clinics in neighboring States and therefore had received adequate

¹ U. S. Public Health Service, Public Health Reports, vol. 31, No. 46, Nov. 17, 1916. *Mental Status of Rural School Children*, pp. 3174 ff.

diagnosis. An additional number of cases had had physical and mental examinations by local physicians. Some cases were of such low-grade mentality that they could be classified as feeble-minded without mental examinations.

Inmates of institutions for juvenile delinquents examined and found feeble-minded were included. It was impossible to present adequate data concerning inmates of institutions for dependents, since no mental examinations had been made. From the latter institutions, therefore, only a few cases which had been examined previously or which were unquestionably feeble-minded were included as positive cases. The recent provision for examination of delinquent children and of such dependent children as come before the Wilmington juvenile court will undoubtedly in time be extended to include all children of doubtful mentality in the care of agencies and institutions.

The list of possible mental defectives secured from all sources was analyzed into three groups of cases:

1. Positive cases of mental defect.
2. Questionable cases.
3. Cases dropped because probably not feeble-minded. Among these cases were 15 epileptics excluded from the positive or questionable cases because there was no evidence of mental deterioration.

"Positive cases" included those diagnosed as mentally defective by competent authority and those of so low a grade of mentality as not to require examination.

"Questionable cases," or cases of probable mental defect, included those of doubtful mentality who were not given mental examinations and those for whom positive diagnoses could have been made only after more prolonged observation than it was possible for the examining physician to give.

Individuals adjudged mentally defective through diagnoses or because they appeared to be obvious cases were followed further. Information was secured by means of investigation of home conditions supplemented by school records and by data secured from agencies and institutions and from individuals having particular knowledge of the cases studied. The points covered included economic status and character of the family; physical conditions and developmental history; personal characteristics; school history and attainments; occupational history and economic efficiency; social reactions, including delinquencies and other antisocial tendencies; and ability of the family to care for and safeguard the defective individual. Social data less extensive than those secured for the positive cases were obtained for cases of questionable mentality.

POSITIVE CASES OF MENTAL DEFECT.

NUMBER, LOCATION, AND GENERAL DATA.

Two hundred and twelve positive cases of mental defect were studied in New Castle County. Of these, 138 had been diagnosed as defective by a surgeon of the Public Health Service or other alienist or physician competent to determine mentality, and 74 were such low-grade defectives that mental examinations were not required. It must be borne in mind that this number did not include all of the individuals in New Castle County who were mentally defective. The difficulty of making mental diagnosis in the higher grades of defect and of securing mental tests of individuals not in schools or institutions or under the care of agencies rendered it impossible to obtain a complete count of mental defectives in a general investigation. These 212 mental defectives included as positive cases constituted a minimum of the number who were dependent, delinquent, or problematic individuals in the community.

One hundred and thirty-two mental defectives, 62 per cent of the positive cases studied, were at large in the community, living in their parental homes, with relatives, in foster homes, in homes of their own, or having no permanent place of abode.

Eighty mental defectives were receiving permanent or temporary care in some kind of an institution; but only 12, or 5.7 per cent of the total number, were in an institution designed for the care of the feeble-minded.

Of the total number of mental defectives studied, 159 were white and 53 colored. The proportion of colored persons among the defectives was considerably higher than that in the general population of this county. One hundred and twenty-six of the mental defectives were males and 86 were females.

TABLE 1.—Mental defectives at large in the community and in institutions, according to color, age, and sex.

Mental defectives.									
Color and age.	Total.	Male.	Female.	At large in community.			In institutions.		
				Total.	Male.	Female.	Total.	Male.	Female.
Total.....	212	126	86	132	73	59	80	53	27
White.....	159	86	73	99	48	51	60	38	22
Under 7.....	3	2	1	2	1	1	1	1	.....
7 to 13.....	40	24	16	37	22	15	3	2	1
14 to 17.....	49	25	24	31	12	19	18	13	5
18 to 20.....	13	5	8	10	3	7	3	2	1
21 to 44.....	44	25	19	17	9	8	27	16	11
45 and over.....	10	5	5	2	1	1	8	4	4
Colored.....	53	40	13	33	25	8	20	15	5
7 to 13.....	15	14	1	10	9	1	5	5	.....
14 to 17.....	16	11	5	8	5	3	8	6	2
18 to 20.....	6	6	.....	4	4	.....	2	2	.....
21 to 44.....	12	7	5	9	6	3	3	1	2
45 and over.....	4	2	2	2	1	1	2	1	1

The small number of children under 7 years of age reported, only 3 in all, indicates the difficulty of determining mentality at an early age. Between the ages of 7 and 13 inclusive were 38 boys and 17 girls. The marked preponderance of boys in the 7 to 13 year age group of mental defectives can probably be accounted for by the fact that in many cases children are not recognized as mental defectives until they become socially troublesome. This occurs as a rule at a later age among girls than among boys, since the type of delinquency of girls is usually moral waywardness. In the 14 to 17 year group were 36 boys and 29 girls. Eleven boys and 8 girls were 18 to 20 years of age. Of the defectives 21 years of age and over, 39 were men and 31 were women.

One hundred and forty-two mental defectives were under 21 years of age, as compared with 70 who were 21 years and over. The number of children is relatively large, partly because this study was concerned primarily with defective children and also because of the difficulty of securing mental examinations of adults. Almost half of the adult cases for whom sufficient information was obtained to warrant classification as mental defectives were in the hospital for the insane.

Recurrence of mental defect was found in 6 families having 2 or more children who were mentally defective. In these 6 families there were 17 feeble-minded children. In 2 of these families the mothers also were feeble-minded. Mental examinations showed that 6 children of 1 family were mentally defective, the only other child being too young for diagnosis. In addition to these families there were 8 children in families other members of which are classified in this report as of questionable mentality. A considerable number of other families having defective children were of a low grade and degenerate type, the father or mother or other children being reported as mentally below normal.

HOME CONDITIONS OF MENTAL DEFECTIVES AT LARGE IN THE COMMUNITY.

The needs of the defective individual and the welfare of the community both must be considered in any attempt to determine the extent and meaning of the problem of mental deficiency. What are the home conditions surrounding mental defectives? Are they receiving adequate care, protection, and training? How serious is the burden imposed upon the family by the presence in the home of defective children, especially those of very low grade?

TABLE 2.—*Mental defectives at large in the community, according to location, color, age, and sex.*

Color and age.	Mental defectives at large in community.																	
	Total.	Male.	Female.	In parental homes.			With relatives.			In foster homes.			In own homes.			Having no homes.		
				Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
Total.....	132	73	59	99	58	41	10	8	2	9	6	3	3	....	3	11	1	10
White.....	99	48	51	75	39	36	6	4	2	6	4	2	1	....	1	11	1	10
Under 7.....	2	1	1	2	1	1	....	....	....	....	....	....	....	....	....	....	....	....
7 to 13.....	37	22	15	32	19	13	2	1	1	3	2	1	....	....	....	....	....	....
14 to 17.....	31	12	19	23	9	14	2	1	1	3	2	1	....	....	....	3	....	3
18 to 20.....	10	3	7	7	3	4	....	....	....	....	....	....	....	....	....	3	....	3
21 to 44.....	17	9	8	10	6	4	2	2	....	....	....	....	....	....	....	5	1	4
45 and over.....	2	1	1	1	1	....	....	....	....	....	....	....	1	....	1	....	....	....
Colored.....	33	25	8	24	19	5	4	4	....	3	2	1	2	....	2	....	....	....
7 to 13.....	10	9	1	8	8	....	1	1	....	1	....	1	....	....	....	....	....	....
14 to 17.....	8	5	3	5	2	3	2	2	....	1	1	....	....	....	....	....	....	....
18 to 20.....	4	4	....	3	3	....	....	....	....	1	1	....	....	....	....	....	....	....
21 to 44.....	9	6	3	8	6	2	....	....	....	....	....	....	1	....	1	....	....	....
45 and over.....	2	1	1	....	....	....	1	1	....	....	....	....	1	....	1	....	....	....

Ninety-nine of the 132 mental defectives at large in the community in New Castle County were living in their parental homes; 19 were being cared for by relatives or in foster homes; 3 were living in their own homes; and 11 had no permanent place of abode.

Living in parental homes.

The coincidence of mental defect and low grade of environment was striking. Of the 99 mental defectives in their parental homes 43 belonged to families having very small and irregular incomes barely sufficient to maintain the family, while 13 were in families more or less dependent upon public or private charity, making a total of 56 either dependent or on the verge of dependency. Of the remaining 43 only 4 or 5 were in what might be called well-to-do families. The majority of them were in homes of wage earners who at the time of the study were financially able to provide for their defective children. In 5 of these cases, however, there were abnormal home conditions, due to death of the mother, to alcoholism, insanity, or low mentality of the parents.

TABLE 3.—Mental defectives at large in the community, according to location and living conditions.

Location.	Mental defectives at large in the community.		
	Total.	Living conditions.	
		Favorable.	Unfavorable.
Total.....	132	49	83
White.....	99	39	60
In parental homes, income adequate.....	36	32	4
In parental homes, very low income.....	39	.....	39
With relatives.....	6	4	2
In foster homes.....	6	3	3
In own homes.....	1	.....	1
Having no homes.....	11	.....	11
Colored.....	33	10	23
In parental homes, income adequate.....	7	6	1
In parental homes, very low income.....	17	.....	17
With relatives.....	4	2	2
In foster homes.....	3	2	1
In own homes.....	2	.....	2

Of the 56 defective individuals belonging in families found to have very low and irregular incomes 39 were white and 17 were colored. It will be noted that this represented more than one-half of the white and nearly three-fourths of the colored defectives living in their parental homes.

Only 14 of the 39 white defectives belonging in families having very low incomes were living in home surroundings otherwise favorable. The abnormal home conditions surrounding the other 25 are indicated by the following: In the families of 6 the fathers were dead; in one of these families the mother was reported as of low-grade mentality. In 3 families the fathers had deserted. The fathers of 6 were physically disabled; in one of these families the mother was alcoholic and in another of low-grade mentality. In 7 cases the fathers were alcoholic; in 2 of these families the mothers were mentally subnormal. In 2 cases both father and mother were of low-grade mentality. In 1 family in which the father was reported normal the mother was mentally below normal. In many of these families immoral conditions or very low standards of home life prevailed. The members of one of the families in which the father was alcoholic and the mother was of low mentality were professional beggars.

Four of the mothers whose husbands were dead, physically disabled, or alcoholic were gainfully employed. The number of mothers gainfully employed would undoubtedly have been larger had not the burden of caring for mentally defective children made it impossible for them to work. The feeble-minded children were provided for with the greatest difficulty and were a constant handicap to normal members of the family.

Three of the 17 colored mental defectives belonging in families having very low incomes were living in home surroundings otherwise favorable, although in 1 case the mother was working away from home. Eight of the 14 living in homes where there were other bad conditions in addition to extreme poverty were illegitimate children, 6 of them having mothers reported as mentally defective. In 1 of the 14 cases the father was dead; in 2 cases, deserted; in 2, alcoholic; and in 1 case of low mentality. In 10 of these 14 cases the mothers were gainfully employed, practically all of them working away from home, with consequent neglect of the children.

Cared for by relatives.

Six white and 4 colored mental defectives were under the care of relatives because of death or separation of parents or bad conditions in parental homes. Four of the white and 2 of the colored defectives were receiving adequate care at the time of the investigation; 4 were living under conditions which made it impossible for them to receive proper care. One of these was a 14-year-old boy who had a police record for delinquency. He was living with his aged grandmother, who kept a cheap boarding house. The boy's father was in the workhouse, and the mother was reported to be keeping a house of ill fame. The grandmother was anxious to have the child placed in an institution. Both of the colored boys living under bad home conditions were troublesome and unruly. One of them, 14 years of age, was living with his maternal great-aunt, whose home was poor and filthy. He was an illegitimate child whose mother belonged to a degenerate family in which there were illegitimacy, syphilis, and feeble-mindedness. The other had been abandoned by his mother when an infant. The relative who cared for him was of low-grade mentality and the home was very dirty.

Living in foster homes.

Nine mentally defective children, 6 white and 3 colored, were living with foster parents who had not legally adopted them and therefore had little responsibility or control over the children. Five of these children, 1 of whom had been in court for delinquency, were in good homes. One of these, a boy of 15 whose mother was immoral and alcoholic, had been removed from his home eight years before because of neglect. At the time of the study he was working for his board and seemed to be receiving proper care.

Four were living under detrimental home conditions. Three of these, a boy of 12 and 2 girls 13 and 14 years of age, were living in the same foster home. Two of the children were illegitimate and had been placed in this family by the town authorities after having been abandoned by their mothers. There were, altogether, 7 placed-out children, not related to each other, in this foster home, the family

of 9 living in a four-room house. Five of the children, 3 girls and 2 boys, were of adolescent age. The situation had elements of serious danger, especially since 3 of the children were feeble-minded. The fourth child found living under detrimental conditions was a 14-year-old colored boy who had been brought by his mother when he was a year old to the family with whom he was living. His mother had failed to contribute anything to his support and had visited him only once during the 13 years. The foster-family group consisted of the man and wife; a step-grandson, his wife, and two children; a 28-year-old woman who had been taken by this family as an infant when her mother was committed to an insane asylum; a 13-year-old girl, a distant relative of the family, diagnosed by the Public Health Service as "suspected feeble-minded;" and this feeble-minded boy. The house was poor and dirty, and the boy had little chance of receiving proper supervision.

Living in own homes.

The problems involved in the three cases described as "living in own homes" may be best indicated by citing the cases:

A mentally defective white woman, 45 years of age, herself an illegitimate child from a degenerate family, was the mother of 4 children. Her husband was alcoholic, had a court record, and worked irregularly. The home was neglected and overcrowded, and drunkenness and immorality prevailed. The family was partially dependent on charitable aid. The daughter, who was of questionable mentality, had been an inmate of a reformatory and was living away from home at the time of the study. All of the children were slow and incapable.

A mentally defective colored woman, 31 years of age, was living with her "common-law" husband, who was a heavy drinker. He was the father of one of her two children. The paternity of the other child was unknown. The older child, a girl of 8, was feeble-minded.

A mentally defective colored woman, 51 years of age, was maintaining a home with her brother, her 2 illegitimate feeble-minded sons, and a lodger. Her sons, both over 20 years of age, had never attended school. The mother was too defective to maintain the home properly or to give her sons adequate care.

Having no homes.

Eleven mental defectives, 1 man and 10 women, had no homes. All but 1 were dependent for support upon their own resources. The man was a "neighborhood idiot," who consorted with a rough gang and lived wherever he could find shelter. All of the women were under 30 years of age, 6 of them being from 16 to 19 years old.

Both parents of 3 of the women were dead; the mothers of 2 others were dead, and the father of 1 of these had deserted. In another case the mother had deserted the family. Six of the women had been inmates of institutions for delinquents, and 2 others had court records.

The following cases illustrate the need for institutional provision for mental defectives without home protection:

A girl 17 years of age, who had been on the State's waiting list for admission to the Pennsylvania Training School for three years, had been separated from her own unsuitable family group (consisting of her father and two brothers, all of whom had bad reputations) and sent to a sister, who had found her too demoralizing to remain a member of her household. She had recently been sent to live with a family which kept a boarding house. Arrangements were being made to send the girl to Philadelphia to live with an aunt who was the proprietor of a low-grade lodging house for men. Three years before this girl had been in court on a charge of incorrigibility, and she had since been known to the police unfavorably. The year before she had been for a short period in the hospital for the insane, but the family insisted on her release. Public schools, police, park guards, probation officers, charitable organizations, and benevolent individuals had one after another been confronted with her problem, and, lacking facilities for proper institutional care, had failed to solve it.

A 16-year-old girl who had been in an institution for delinquent girls had a reputation for being dishonest and having a low standard of morals. She was working in a boarding house of questionable character. Her mother, an immoral woman, had deserted the family.

A 23-year-old woman whose father was dead and whose mother was in a hospital for the insane had been known to the authorities since she was 13 because of various delinquencies. She had been for a short time an inmate of the hospital for the insane, having been sent there because of her low mentality and degeneracy. She had no fixed residence, and since the age of 20 had been living in immoral surroundings.

PERSONAL CHARACTERISTICS AND SOCIAL REACTIONS OF MENTAL DEFECTIVES AT LARGE IN THE COMMUNITY.

Mental defectives physically handicapped.

Forty-six per cent of the 132 mental defectives not cared for in institutions were to some degree physically handicapped. In most cases the physical disability was such as to aggravate seriously the mental defect and increase the burden of care. The physical defects varied from speech defect to absolute helplessness. In a large number of cases there was a complication of physical disabilities.

The 44 white and 17 colored cases for whom physical defects were reported may be classified as follows:

Absolutely helpless, 9.

Crippled or paralyzed, 10 (including 5 having defective vision or speech also).

Epileptics, 8 (including 3 who were also crippled and 3 having speech defect).

Defective vision, 4 (including 2 who also had defective hearing and speech).

Defective hearing, 5 (including 3 who also had speech defects, 1 of whom could not talk, and 1 having defective vision as well).

Speech defects, 14 (including 4 who had never talked, 3 of whom were also slightly crippled; 1 other also had defective hearing, and 2 were slightly crippled).

Other physical disabilities (including hydrocephalus, cretinism, St. Vitus's dance, cerebral palsy, syphilis, rachitis, etc.), 11 (including 1 who also had speech defect).

The urgent need for custodial care, particularly for those individuals who are absolutely helpless as a result of physical and mental defect, is illustrated by the following cases:

A boy of 17 had been helpless from birth. He was very much undersized; his legs were bent and atrophied; he could not talk. He had to be dressed and fed. The father of the family had deserted six years before. The care of this boy prevented his mother from working, and the family was aided by relatives.

A boy of 21 whose legs were deformed was unable to stand; he could not talk. His family consisted of father, mother, and 2 other children. The father worked irregularly and the mother had difficulty in maintaining the home.

Only two families in which there were mental defectives who were absolutely helpless had incomes at all adequate for proper maintenance of the family. Five families had very low incomes on account of the death, desertion, or intemperance of the father.

The mentally defective child as an educational problem.

Many children so defective mentally that they could not profit by ordinary instruction were attending school during the year 1915-16. Forty white and 11 colored mental defectives 7 to 17 years of age, inclusive, almost three-fifths of the total number of this age group at large in the community, attended school during that school year. The grades for 2 were not reported. Twenty-five children were still in the first grade, although only 4 of them were under the age of 10 years. Eight children in the first grade were 10 or 11 years of age; 9 were 12 and 13 years old; 2 were 14; and 2 were 17 years of age. Of the 21 children 10 years of age and over still in the first grade, 15 were white and 6 colored.

One of the children in the first grade was a colored boy 17 years of age. He had entered school at the age of 6 and attended through the first term of the school year 1915-16. He had defective sight and speech and could not walk properly. The school authorities finally requested that he be kept at home, as he was receiving no benefit from his attendance. During the 11 years he attended school it was found impossible to teach him even the alphabet.

TABLE 4.—*Mental defectives 7 to 17 years of age at large in the community and attending school, 1915-16, according to age, color, and grade attained.*

Age.	Mental defectives 7 to 17 years of age attending school, 1915-16.													
	Total.	White.								Colored.				
		Total.	Grade attained.							Total.	Grade attained.			
			1st.	2d.	3d.	4th.	5th.	6th.	Not re-ported.		1st.	2d.	3d.	4th.
Total.....	51	40	18	5	5	6	3	1	2	11	7	3	....	1
8 years.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9 years.....	3	2	2	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
10 years.....	5	5	3	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
11 years.....	5	4	4	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
12 years.....	11	9	5	2	1	.....	1	.....	.....	2	1	1	.....	.....
13 years.....	6	4	1	1	1	1	.....	.....	.....	2	2	.....	.....	.....
14 years.....	11	10	2	1	2	3	1	.....	1	1	.....	1	.....	.....
15 years.....	5	3	.....	.....	1	2	.....	.....	.....	2	.....	1	.....	1
16 years.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
17 years.....	3	1	.....	.....	.....	.....	1	.....	.....	2	2	.....	.....	.....

Twenty-four children were in grades above the first. Of the 8 children in the second grade, 1 was 10 years of age, 4 were 12 and 13 years of age, 2 were 14, and 1 was 15 years old. Five children ranging in age from 12 to 15 years were in the third grade. The highest grade reported was the sixth, reached by one 16-year-old child. Of the 24 children in grades above the first, 20 were white and 4 were colored. Three of the colored children, 12, 14, and 15 years of age, were in the second grade and 1 was in the fourth, although her teacher said she really belonged in the first grade.

A number of children in grades higher than the first were reported as having been promoted simply as a matter of routine, teachers passing them on, after they had spent two or three years in one grade, because they were too large for the grade and their presence was detrimental to the younger children.

Sixteen mentally defective children 7 to 13 years of age, inclusive, one-third of all in this group at large in the community, and 19 of the 39 children 14 to 17 years of age were not attending school during the year the study was made. Of these 35 children not in school, 14 (10 white and 4 colored) had never attended because they were too defective. They were of an age when they might derive benefit from the proper kind of training. Of the children 7 to 13 years of age not in school, 12 were white and 4 were colored; of those 14 to 17 years, 16 were white and 3 colored.

TABLE 5.—*Mental defectives 7 to 17 years of age at large in the community, according to age, color, and school history.*

Age and color.	Mental defectives 7 to 17 years of age at large in the community.					
	Total.	In school, 1915-16.	Not in school, 1915-16.			
			Total.	At- tended pre- viously.	Never attended school.	Previous attend- ance not reported.
Total.....	86	51	35	19	14	2
7 to 13 years.....	47	31	16	5	11	.....
White.....	37	25	12	4	9	.....
Colored.....	10	6	4	1	3	.....
14 to 17 years.....	39	20	19	14	3	2
White.....	31	15	16	12	2	2
Colored.....	8	5	3	2	1	.....

Ten mental defectives 18 years of age and over, almost one-fourth of the total number in this age group, had never attended school. Of the 2 children under the age of 7 not in institutions, 1 was a helpless idiot and the other was so defective that he would probably never be able to attend the regular schools.

Three of the white children under the age of 14 years who were not in school at the time of the investigation, but who had attended formerly, were brothers 7, 9, and 11 years of age. All three went for a short time about a year before the study was made, having had no previous school experience. None of them attended more than part of one term and none made any progress.

A colored child 9 years of age, living in a foster family, attended a public school, and, failing to make progress, entered a parochial school. There he was so stupid and troublesome that he was excluded on account of his bad influence on the other children.

The only schooling a boy of 14 received was at a kindergarten which he entered at the age of 12 but from which he had to be excluded because of his bad influence. A girl of 15 had left school at the age of 14, having reached the third grade. She was reported, however, as being unable to read or write or do the simplest arithmetic. A boy of 16 attended school two or three years, but the other children teased and irritated him and he learned nothing and had to be expelled. Records of older children and of adults indicate similar difficulties involved in attempting to teach defective children in the same classes with those of normal mentality.

The need for special provision for the education of defective children is imperative, for the sake not only of the defective himself but

also of school children of normal mentality. Mental defectives who are also physically handicapped are in particular need of special training. The combination of physical and mental defect makes it practically impossible to do anything for them in the regular schools.

The fact that some mentally defective children who have been absolute failures in school are able to do simple manual work indicates that they might have benefited greatly by some kind of industrial training.

Mental defectives as industrial inefficient.

Recent agitation for such measures as workmen's compensation and a minimum wage have forced upon public attention the problem of those who because of defective intelligence can not exercise the discretion necessary to avoid industrial accidents and who can not compete on equal terms with their fellow workers. Furthermore, investigations into the causes of unemployment have emphasized the large number who are unemployable because of physical or mental handicaps.

Eighteen of the 60 white and 9 of the 23 colored mental defectives 14 years of age and over living at large in the community had been employed in some sort of gainful occupation. In almost every case the employment had been very irregular, the task simple in character, and the work poorly performed. Some of these individuals were reported, however, as working satisfactorily under supervision.

The following cases illustrate the helplessness and inefficiency of mentally defective individuals whose training and employment are left to chance:

A boy of 16 did simple errands and odd jobs. He was incapable of doing other than the lowest grade of work.

A girl of 16 left school at 13 to go to work, falsifying her age to secure employment. She had not made any progress in school. She was employed in a mill for a time, but was a very poor worker. She was not employed at the time of the investigation.

A girl of 17 did scrubbing for her neighbors. She could not work except under supervision.

A man of 24 worked in a factory for a month at \$8 a week; he was discharged because of inefficiency. He worked in several other places for short periods, but was never able to hold a position long.

A man of 22, who had been in school six years but never advanced beyond the first grade, had worked occasionally as an errand boy. He failed at another simple employment because people took advantage of him. He had shown a slight aptitude for mechanical work, which had been undeveloped because of lack of training.

A boy of 17 was unable to do regular work because of epileptic seizures. He had worked occasionally at odd jobs. He would be able to do farm work under favorable conditions.

The increased efficiency resulting from training and supervision is illustrated by the case of a girl of 22 who was for three years an inmate of an institution for delinquents, receiving domestic training there. She was under supervision for four years after leaving the institution. She was willing and a good worker and was able to be self-supporting but not self-directing. Other cases illustrate ability to perform household tasks or other simple work if the defective is given the proper training and direction. The possibility of teaching the feeble-minded special trades is illustrated by the case of a man of 24 whose father had taught him to cane chairs. He worked at home and did satisfactory chair caning, but both he and his mother, with whom he lived, were unable to make change correctly and protect themselves against exploitation. Under proper supervision this man would undoubtedly be self-supporting.

Institutions for the feeble-minded have demonstrated that training and opportunity to work under supervision is of distinct benefit to many mental defectives and lessens the burden of their support.

Mental defect as a social menace.

The social burden of feeble-mindedness is heaviest when defective individuals are delinquent or immoral. Mental defectives through lack of judgment and self-control are easily led into wrongdoing. Many of the defectives studied were living under conditions making wholesome family life impossible, and the coincidence of bad environment and mental defect aggravated antisocial tendencies. The various social relations in which a mentally defective person constitutes a problem are indicated by the large number of officials, teachers, physicians, persons concerned with delinquents and dependents, welfare workers, and private individuals who furnished information in regard to cases known to them. Especially significant is the number of different sources from which the same defective individuals were reported.

Forty-six, or 35 per cent, of the 132 mental defectives at large in the community were reported as delinquent, degenerate, or uncontrollable. Twelve of them were living under favorable home conditions, 11 being cared for in their parental homes. Thirty-four were living under unfavorable home conditions—18 in parental homes, 4 with relatives or in foster homes, and 12 in homes of their own or without permanent homes.

TABLE 6.—*Mental defectives at large in the community, according to home conditions and character.*

Home conditions.	Mental defectives at large in the community.		
	Total.	Of good character so far as known.	Delinquent, degenerate, or uncontrollable.
Total.....	182	86	46
Favorable home conditions.....	49	37	12
Parental homes.....	38	27	11
Relatives' or foster homes.....	11	10	1
Unfavorable home conditions.....	83	49	34
Parental homes.....	61	43	18
Relatives' or foster homes.....	8	4	4
Own homes or having no homes.....	14	2	12

Eighteen of the 46 had delinquency records, 8 of them being former inmates of an institution for delinquent girls and 8 males and 2 females having court or police records. Twenty-one males and 7 females were classed as degenerate or immoral, unmanageable, or concerned in various kinds of minor misdemeanors. In some instances it was reported that the misdemeanants would have been arrested if their defect had not been generally recognized.

The menace of delinquent and unmanageable defectives to the home, school, and community is illustrated by many of the cases studied, of which the following are examples:

A girl of 23 had been known to a charitable agency since 1903. At that time her family was destitute, irresponsible, and depraved. Soon afterwards her father died. Her mother was in a hospital for the insane at the time this study was made. After her father's death this girl spent a few months in an orphanage. At the age of 13 she was begging on the streets. At 20 she was discovered in vile surroundings, living with a degenerate family. Soon afterwards she was reported as frequenting disorderly houses in Philadelphia. She was brought back to Delaware and committed temporarily to the hospital for the insane. After a brief residence there she returned for a time to the degenerate family with whom she had previously lived. The hospital for the insane was too crowded to readmit her. She married a worthless man, whom she shortly deserted to live with another man. Later she went back to her husband, but he turned her out.

A boy of 24, exceedingly untruthful, was alcoholic and a cigarette fiend. He had a violent temper and was always threatening to kill some one. He obtained money from neighbors under false pretenses, and stole everything that he could lay his hands on. He used his younger brother as a tool in his wrongdoing. His associates were delinquent boys. Although he came of a good family his parents considered him completely beyond their control. He had been in the hospital for the insane for three years, but had been released several years before.

The relation between low mentality and illegitimacy is brought out by the fact that 7 mental defectives, 3 white and 4 colored, were mothers of illegitimate children, and that 20 defectives, 6 white and 14 colored, were themselves illegitimate. The 7 mothers had had 14 illegitimate children. Two of these mothers were only 17 years of age. One feeble-minded colored woman, herself illegitimate, had 2 illegitimate children, both of whom were imbeciles. Another feeble-minded colored woman had had 2 illegitimate children. One mentally defective colored woman was known to have had 6 illegitimate children. Two of her children were low-grade feeble-minded and two others, who had died, were reported as having been feeble-minded. The mother of 3 illegitimate mental defectives was reported of low-grade mentality. The mother of a feeble-minded illegitimate boy was described as "simple" and "foolish."

Illegitimate children are usually without normal family protection. Feeble-minded children who are illegitimate are in particular need of public supervision. Only 8 of the 20 illegitimate mental defectives were being cared for in their parental homes. All of the 8 were colored. Three of the 6 white children who were illegitimate were in institutions, 2 were in foster families, and 1 was living in her own home, where very immoral conditions prevailed. Two of the colored illegitimates were in institutions and 4 were in the homes of relatives or in foster homes.

MENTAL DEFECTIVES IN INSTITUTIONS.

While the mental defectives from New Castle County in institutions are not a present menace to the community, they are a potential danger because they are not permanently provided for. Those in institutions not adapted for the care of the feeble-minded hamper the efficiency of these institutions. They themselves are not receiving the proper kind of care and training, and their presence is a serious disadvantage to others for whom the institutions are designed.

Eighty of the mental defectives from New Castle County included in this study were in institutions. Nine of them were under 14 years of age; 31 were between the ages of 14 and 20, inclusive. The 40 adults who were in institutions had been provided for in this way either because they had no means of support or because they were a menace to the community.

TABLE 7.—*Mental defectives in institutions, according to kind of institution, color, age, and sex.*

Color and age.	Mental defectives in institutions.														
	Total.	Male.	Female.	For feeble-minded.			For insane.			For delinquents.			For dependents.		
				Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
Total.....	80	53	27	12	10	2	32	17	15	26	22	4	10	4	6
White.....	60	38	22	12	10	2	27	15	12	13	10	3	8	3	5
Under 7.....	1	1											1	1	
7 to 13.....	3	2	1	1	1					2	1	1			
14 to 17.....	18	13	5	3	3		2	1	1	11	9	2	2		2
18 to 20.....	3	2	1	2	2								1		1
21 to 44.....	27	16	11	6	4	2	17	10	7				4	2	2
45 and over.....	8	4	4				8	4	4						
Colored.....	20	15	5				5	2	3	13	12	1	2	1	1
7 to 13.....	5	5								5	5				
14 to 17.....	8	6	2				1		1	7	6	1			
18 to 20.....	2	2								1	1		1	1	
21 to 44.....	3	1	2				2	1	1				1		1
45 and over.....	2	1	1				2	1	1						

In an institution for the feeble-minded.

Only 12 of the 212 mental defectives studied in New Castle County were in an institution for the feeble-minded. Eleven of the 12 were cared for at State expense in the Pennsylvania Training School for Feeble-Minded Children, at Elwyn, Pa. One boy was maintained at the Elwyn institution by his father, under court order. The 11 New Castle County cases supported by the State constituted all but 3 of the total number of mental defectives in the entire State provided for by public funds.

An analysis of the reasons for commitment to Elwyn indicates that urgent necessity led the State to assume the burden of caring for these individuals. Seven of those at Elwyn had been delinquent, vicious, or ungovernable previous to admission, 3 of them having been before the juvenile court. In 4 of these cases unfavorable home conditions, as well as the delinquency of the child, made commitment to an institution urgent. One of the 5 children who were not reported as having been troublesome in the community had been badly neglected at home; another had been in need of care because of the death of his father. In 3 cases the reasons for commitment were not given.

The limitation of the number provided for by State funds at the Pennsylvania Training School for Feeble-Minded Children and the necessity for prolonged care for individuals of the types committed have made it impossible to secure admission of patients to Elwyn

except at very long intervals. Five of the 11 State patients had been in the institution 15 years or more and 4 others 5 years or more.

The almost negligible contribution that this small amount of institutional provision makes in furnishing training for the defective children of the State is evident from the fact that only 6 out of the 142 feeble-minded children under 21 years of age studied in this investigation were provided for at Elwyn. The State's waiting list of applications for admission to this institution contained only 3 names, itself a striking proof that there is known to be very little chance for admission. The 3 cases for whom formal application for admission had been made were among the most serious of those studied in this investigation. One of them was a 17-year-old girl who had been on the waiting list for 3 years. The others were a 19-year-old boy who had been awaiting admission almost 3 years and a 13-year-old girl, temporarily cared for in a foster family, for whom an application had been on file a year. All three have been reported in this study as special community problems in urgent need of permanent care. Many other cases of the same type were found for whom application had not been made, but whose families were anxious to place them in an institution where they could receive the care and training needed.

In a hospital for the insane.

The Delaware Hospital for the Insane was caring for 32 mentally defective patients from New Castle County at the time this study was made. Of these 6 were formerly Delaware pupils in the Pennsylvania Training School for Feeble-minded Children. The hospital for the insane is not fitted to provide the kind of care and training needed for this class of patients, and their presence aggravates the seriously crowded condition of that institution, which for some time has been unable to furnish proper accommodation for the insane requiring care.

Of the 142 mental defectives under 21 years of age 3 were inmates of the hospital for the insane. One of these was 16 and 2 were 17 years old. Of the 70 defectives 21 years of age and over 29 were thus cared for.

Five of the 17 male patients and 4 of the 15 female patients had been in the State hospital from five to nine years; 7 males and 7 females ten years or longer. That 3 men and 4 women had been cared for in this way for twenty-five years or more indicates the burden on the hospital which this class of patients imposes.

These feeble-minded inmates of the hospital for the insane had been placed there because they could not be cared for properly outside of an institution. Their presence in this institution, which

is not adapted to their needs, further emphasizes the necessity for provision for defective individuals who are dependent or who constitute a menace to the community.

Fourteen of the 32 feeble-minded inmates of this institution had been delinquent or uncontrollable, 1 had been an incendiary, 2 had attempted serious crimes of violence, 1 had been admitted from the workhouse to which he had been sentenced for stealing, 1 had had an illegitimate child, and the remainder had been violent, vicious, or otherwise troublesome.

The following are some cases of long-continued residence in the hospital for the insane and of bad family conditions or individual delinquency which made institutional care necessary:

A woman of 42 had been admitted to Elwyn at the age of 6 years. She was discharged from the training school at the age of 21 and admitted to the hospital for the insane, where she had since been an inmate. She was a low-grade imbecile.

Two sisters, aged 34 and 31 years, had been inmates of the hospital for 10 and 18 years, respectively. The older sister had been in this institution when she was 14, and had been sent from there to the Elwyn institution, from which she was returned after a residence of 10 years. Both sisters were very violent at times. Their father had been a hard drinker, and their mother was said to be unbalanced. An aunt had been an inmate of the hospital for the insane.

A woman of 58 had been in the hospital for the insane for 25 years and had previously spent 14 years in Elwyn.

A colored man 54 years of age, a deaf-mute and low-grade imbecile, had been transferred to this institution from the almshouse 39 years before.

Two brothers, 60 and 48 years of age, had been residents of the hospital for 28 and 24 years, respectively. The older was a middle-grade imbecile and the younger a low-grade imbecile. Their mother, also an imbecile, died while an inmate of this institution.

A man of 22, admitted to the hospital shortly before the study was made, had been arrested for setting fire to a house. He was the illegitimate son of a feeble-minded woman reported to be a prostitute.

A man of 37, a low-grade imbecile, had been an inmate of the institution for 8 years. He was reported as irritable and inclined to violence. He was placed in custody after an attempt to assault his mother with a knife.

A girl of 17, recently admitted, had been cared for at home until the death of her father made this impossible. She was a low-grade imbecile, and it was necessary to keep constant watch over her to prevent intimacies with men.

A colored girl of 17, recently transferred from the almshouse, was the mother of an illegitimate child. Her mother, reported as weak mentally, was an inmate of the almshouse and was caring for the baby there.

In institutions for delinquents.

The institutions for delinquents in Delaware are the Ferris Industrial School for Boys (white and colored), the Delaware Industrial

School for Girls (white), and the three county workhouses. Each of the industrial schools averages about 70 inmates, committed from all parts of the State. The New Castle County workhouse has an average of 500 prisoners, including, in addition to those belonging in New Castle County, long-term prisoners from other sections of the State and "drifters" from other States. None of the workhouse inmates were included in this study.

Twenty-six children included in this study as positive cases of mental defect were inmates of the two industrial schools or had been committed to other institutions because of delinquency. Of these, 24 were in the industrial schools; 1 was in a protectory; and 1, a colored girl, had been committed to an institution in a neighboring State, there being no provision in Delaware for delinquent colored girls.

Institutions for the care of delinquent children are greatly handicapped by the presence of defectives, since they require special attention and exert a bad influence over the normal children. After a short period of residence these defectives are returned to the community without sufficient supervision. The abnormal home conditions from which many of the children come aggravate the seriousness of the problem.

The following cases illustrate the urgent need for permanent provision for defectives who are delinquent:

A girl, 14 years old, was committed by the juvenile court to an industrial school because she had run away from home and was living under immoral conditions. The father of this family died of tuberculosis. The mother was reported as being of low-grade mentality. She did some work outside the home and could not give much attention to the family. There were several other children, four of them reported as having tuberculosis. One other girl was diagnosed as probably feeble-minded, and two younger boys were truants from school and were rapidly becoming incorrigible. The family was pauperized and was steadily deteriorating. They had subsisted largely on the insurance money received when the father died. The institution in which the 14-year-old girl was an inmate felt that she was not a proper subject for their care, as she was so abnormal mentally as not to profit from instruction there and later would not be able to maintain herself in the community.

A girl of 13 years was placed in an industrial school, not because of any definite delinquency but because her mentality was such that she had to be protected. The girl was an illegitimate child, and the man her mother later married was not willing to have her in the home. The family was so poor that it was almost impossible to keep the normal children at home. The girl was placed in an excellent home for several weeks, but was so unruly and undisciplined that she had to be removed. The industrial school was not the place for her because of her low mentality.

A 15-year-old colored girl was sent to an institution for delinquent girls because of moral waywardness. She was an illegitimate child of a very immoral woman who was living with a man to whom she was not married. This feeble-minded girl had had immoral relations with men since she was 13 or 14 years old. Her home conditions were always decidedly degrading. After her commitment to the insti-

tution she was placed out in a private family, but ran away. She was then placed in another family with the same result, and afterwards was returned to the institution.

An illegitimate colored boy 16 years of age, who had been diagnosed as imbecile and epileptic, was committed to an industrial school because he was unmanageable at home and very troublesome outside, and the family feared that he would do them physical violence. He had attended school for 8 or 10 years without making any progress. The family group from which this boy came consisted of an aged grandmother, the feeble-minded mother of this boy (herself illegitimate), a brother who was also an imbecile, an aunt who was immoral, and another aunt and three young children. The feeble-minded mother was entirely unable to support her two sons or give them proper care, and she herself stood in need of protection.

The problem of delinquents who are mentally defective has been recognized in Delaware as of great importance. A considerable advance has recently been made in the study of the mental condition of juvenile and adult delinquents in the State.

A special fund was raised for the purpose of securing scientific mental examinations of all inmates of the Ferris Industrial School. These examinations have been made by members of the staff of the psychological clinic of the University of Pennsylvania. The intention is to make adequate mental and physical examinations of every boy admitted to the industrial school hereafter.

The resident physician of the workhouse makes physical and mental examinations of all prisoners on admission. The examination is concerned chiefly with environmental influences, amount of education, and the question of insanity or physical or mental defect. Owing to the difficulty of determining accurately the place of residence and of securing social data for these cases, they have not been included among those cases investigated by the Children's Bureau. They represent, however, a class of adults most dangerous to the community. The records of the workhouse, although necessarily incomplete because of falsification of names and difficulty of identification, indicate that there are many persistent repeaters. Men were reported who had been committed from 45 to 55 times. The importance of knowing the mentality of these men is clearly evident in order that those who are feeble-minded may be given permanent care.

A satisfactory estimate of the number of delinquents in the community who are mentally defective and in need of permanent care can not be secured by examination of institution inmates alone, since they represent only a section of a constantly shifting group. Mental clinics are now being held in Wilmington on one day every two weeks for all cases appearing before the juvenile court, and the special fund which makes this possible provides also for taking to the Philadelphia clinic children who are in particular need of examination between the dates of the clinic in Wilmington. Thus in time it will be possi-

ble to secure adequate information in regard to juvenile delinquents who are feeble-minded or otherwise mentally abnormal.

In institutions for dependents.

Ten of the positive cases of mental defect studied in this investigation were in institutions for dependents; five of these persons had previously been delinquent or uncontrollable. This was far below the actual number of mental defectives in such institutions. No such report was available in regard to the mentality of inmates of institutions for dependents as was secured concerning inmates of the Delaware Hospital for the Insane and the Ferris Industrial School for delinquent boys, since facilities for mental examination of persons admitted to institutions for dependents were not available at the time this investigation was made. The clinic that has since been established provides for the examination of dependent as well as delinquent children committed by the juvenile court. Even if it had been possible to secure diagnoses of all inmates of institutions for dependents in Delaware, these would not have shown what proportion of dependents in New Castle County were mentally defective, because dependent children are provided for outside of the State as well as in local institutions.

Institutions for dependent children provide care only until the child reaches a certain age. The highest age of discharge of any institution for the care of dependent children in Delaware is 18. One institution discharges its boys at the age of 11 or earlier, placing them in family homes. On reaching the age limit, and often several years before that time, institution children are returned to the community, at best with the protection of foster homes where they are supposed to earn their board. The inadequacy of such protection for feeble-minded children is evident. Institutions sometimes retain defective children beyond the age limit because of the seriousness of their condition, but they can not permanently provide for them.

The need for permanent provision for mentally defective children now temporarily kept in institutions for dependents is illustrated by the three children included in this study provided for in such institutions.

A child of 4 years was such a burden to his mother because of physical and mental defect that she was forced to neglect her other children to care for him. As a result one of the other children was sent to an institution for delinquents. An aid society then sent the defective child to a babies' hospital in order to relieve the home situation. This solution of the problem was only temporary.

An illegitimate child was cared for after her mother's death by a relative until her mental condition made institutional care imperative. She was past the age when she should be cared for in an institution for dependent children, but she was not able to earn her own livelihood, and there was no other place for her to go.

A feeble-minded boy, both of whose parents were dead, was being cared for in an institution for dependent children, although over the age limit, because there was no other way of providing for him.

Mentally defective adults who become dependent must rely in most cases on the almshouse for shelter. The almshouse can exercise no discretion as to the length of stay of inmates, who may come and go at will; nor is it equipped to give mental defectives the proper kind of care and training.

Mental examinations of the 200 inmates of the New Castle County almshouse had never been made, and in the absence of records histories of present or past inmates could not be secured. A considerable percentage would probably have been found feeble-minded if they had been examined. Reports were secured for 6 feeble-minded inmates, 2 of whom were under 21 years of age. The following cases illustrate the problem of mental defectives in almshouses:

A woman 41 years of age and her 19-year-old daughter, both feeble-minded, had been sent to the almshouse eight years before and had remained there ever since. The father of the family had deserted, and the mother had been arrested for neglect. The other 7 children also were sent to the almshouse, but were later placed in families by a child-placing agency. One of the children, 15 years of age at the time of the investigation, had been committed to an institution for delinquents at the age of 13, where she remained nearly two years. She, too, was in the almshouse. The older girl tried to do housework, but was too defective mentally.

A feeble-minded woman had been placed in the almshouse six or seven years before because there had been no one to care for her after the death of her mother. Her relatives contributed to her support.

A man of 35, classed as an idiot, had been in the almshouse 7 years. He had been sent there after the death of his father because his mother was alcoholic and his sisters were unable to care for him.

The burden of caring for mental defectives often falls on other institutions for dependent adults. For example, a feeble-minded colored woman 28 years of age, who had no one to care for her after the death of her mother, had lived for 10 years in a home for the aged.

The 32 defectives reported from the Delaware Hospital for the Insane, the 26 defective children reported from institutions for delinquents, the 10 obviously feeble-minded persons reported from institutions for dependents, are in no sense a measure of the problem of defectiveness among institution inmates in Delaware. They serve merely to illustrate the need for an institution affording special training and opportunity for permanent care.

EXTENT OF NEED FOR SUPERVISION AND INSTITUTIONAL CARE.

Ninety-five of the 132 mental defectives at large in the community were without adequate home protection, or were delinquent, degenerate, or uncontrollable. Sixty-eight were in institutions not adapted to their needs, and the 12 in an institution for the feeble-minded were not permanently provided for. These 175 mental defectives, 82.5 per cent of the total number, were grouped as follows according to location, home conditions, and social reactions:

1. Eleven living in their parental homes under favorable home conditions were delinquent, degenerate, or uncontrollable.

2. Sixty-one were living in their parental homes under conditions which, because of extreme poverty, alcoholism, immorality, low mentality of parents, or entire lack of home protection, made adequate care impossible. Of these, 18 were doubly in need of protection because they themselves were delinquent or uncontrollable.

3. Nine of those in need of public protection were living with relatives or in foster homes. One of them was living under favorable home conditions but was delinquent, the other 8 were living under unfavorable home conditions, and 4 of them were delinquent or uncontrollable.

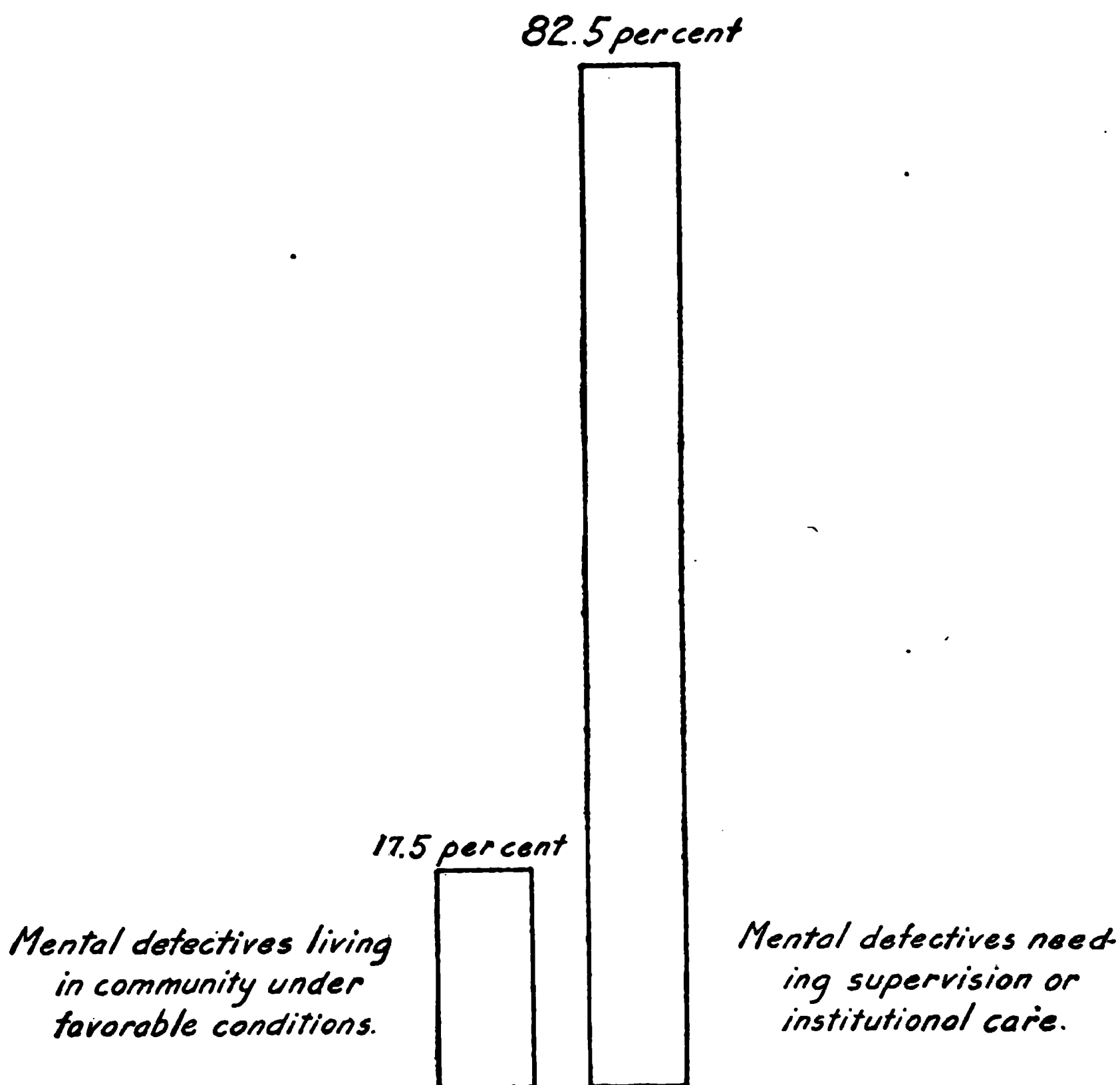
4. Fourteen mental defectives, 13 women and 1 man, were living in homes of their own or had no permanent place of abode, and were urgently in need of supervision or custodial care. The 3 women living in their own homes were degenerate and immoral and were living under extremely bad conditions. Eight of the 11 mental defectives having no homes had delinquency records and 1 was degenerate.

5. The 36 mental defectives in institutions for delinquents or dependents should be cared for in an institution better adapted to their needs and giving permanent care.

6. The 32 mental defectives in the hospital for the insane were undoubtedly in need of permanent custodial care, a fact indicated by their admission to the institution. It is not possible in this institution to give such patients care adapted to their condition, and they handicap the work for which the hospital is intended.

7. In estimating the need for institutional provision in Delaware the 12 mental defectives cared for in an institution for the feeble-minded outside of the State must be considered. Although being adequately provided for at the time of the investigation, they were not assured of permanent care and were likely to be removed after a period of training to make room for new cases.

It should be remembered that these 163 mental defectives who appeared to be in immediate need of supervision or appropriate institutional care, and the 12 who were temporarily receiving care in an institution for the feeble-minded, represented a minimum estimate of those in need of public protection.



Mental Defectives in New Castle County.

QUESTIONABLE CASES.

In addition to the number included in this study as positive cases of mental defect, 361 of the individuals reported as possibly feeble-minded were considered questionable cases.

Eighty-one of these were school children who had been examined by the Public Health Service and classified as probably feeble-minded but needing more extended examination and observation before positive diagnosis could be made. Many of the other cases appeared from the evidence in hand to be mental defectives, but owing to the

absence of adequate mental diagnoses they were not classified as such because of the possibility that their subnormality might be due to physical handicaps or other detrimental conditions rather than to innate mental defect. Physical handicaps varying from speech defect to absolute helplessness were reported for 80 of the 361 individuals of questionable mentality studied. This number included 5 who were epileptic also. It was obviously impossible to estimate the number of actually defective individuals among the questionable cases, but adequate mental and social examinations would undoubtedly reveal a large number of positive cases.

Of the 361 individuals of questionable mentality 302 were white and 59 were colored; 198 were males and 163 females. Two hundred and eighteen were under the age of 14 years; 117 were between the ages of 14 and 20; 26 were 21 years of age and over. The proportion of children was large because the study was concerned particularly with children and because much of the information in regard to these cases was secured from schools.

TABLE 8.—*Individuals of questionable mentality at large in the community and in institutions, according to color, age, and sex.*

Color and age.	Individuals of questionable mentality.								
	Total.	Male.	Female.	At large in community.			In institutions.		
				Total.	Male.	Female.	Total.	Male.	Female.
Total.....	361	198	163	346	194	152	15	4	11
White.....	302	169	133	287	165	122	15	4	11
Under 7.....	7	4	3	7	4	3	.....	.....	.....
7 to 13.....	180	107	73	173	105	68	7	2	5
14 to 17.....	63	37	26	57	35	22	6	2	4
18 to 20.....	31	13	18	29	13	16	2	.....	2
21 to 44.....	18	6	12	18	6	12	.....	.....	.....
45 and over.....	3	2	1	3	2	1	.....	.....	.....
Colored.....	59	29	30	59	29	30	.....	.....	.....
Under 7.....	2	1	1	2	1	1	.....	.....	.....
7 to 13.....	29	18	11	29	18	11	.....	.....	.....
14 to 17.....	19	7	12	19	7	12	.....	.....	.....
18 to 20.....	4	2	2	4	2	2	.....	.....	.....
21 to 44.....	5	1	4	5	1	4	.....	.....	.....

Fifteen of the cases of questionable mentality were in institutions, 10 of them in institutions for delinquents and 5 in institutions for dependents. Three hundred and forty-six were at large in the community; of these, 301 were living in their parental homes; 40 were cared for by relatives, lived in foster homes, in homes of their own, or had no permanent place of abode; in 5 cases no report was secured as to location.

Detailed information was obtained in regard to home conditions and individual characteristics for 226 persons of questionable men-

tality not in institutions. Data were secured in 2 cases on home conditions only and in 18 cases on personal character only. Information as to personal characteristics was secured for the 15 inmates of institutions.

The following analysis indicates the ways in which the individuals of questionable mentality studied constituted community problems, even though they may not have been definitely feeble-minded. The data also indicate the need for mental examinations and special provision for the retarded and the physically handicapped as well as for the feeble-minded.

Information as to home conditions was secured for 175 of the 301 individuals of questionable mentality living in their parental homes. Ninety of these were living under favorable home conditions and 85 in homes detrimental to their moral and physical welfare. Eleven of the 22 living with relatives or in foster families were in good homes, 6 were in bad home surroundings, and the conditions under which 5 lived were unknown. The 18 persons of questionable mentality living in homes of their own or having no permanent homes were living under adverse conditions. The 15 in institutions for delinquents and dependents were provided for only temporarily.

TABLE 9.—Individuals of questionable mentality, according to location, home conditions, and character.

Location and home conditions.	Individuals of questionable mentality.			
	Total.	Of good character so far as known.	Delinquent, degenerate, or uncontrollable.	Character not reported.
Total.....	361	153	88	120
Parental homes.....	301	133	52	116
Favorable conditions.....	90	64	26	.....
Unfavorable conditions.....	85	65	19	1
Home conditions not reported.....	126	4	7	115
Relatives' or foster homes.....	22	14	5	3
Favorable conditions.....	11	9	2	.....
Unfavorable conditions.....	6	4	2	.....
Home conditions not reported.....	5	1	1	3
Own homes or having no homes (conditions unfavorable).....	18	1	16	1
In community but no report as to location.....	5	.....	5	.....
In institutions.....	15	5	10	.....
For delinquents.....	10	.....	10	.....
For dependents.....	5	5	.....	.....

Eighty-eight of the 241 persons of questionable mentality concerning whom information as to personal character was secured were recognized in their communities as delinquent or difficult to control.

Twenty-two of them had been in institutions for delinquents, and 10 were in such institutions at the time of the study; 25 had court or police records; 31 were reported as degenerate or uncontrollable.

Among the cases reported as delinquent, degenerate, or uncontrollable were 9 mothers of illegitimate children. One of them was a girl 17 years of age. The other 8 were over 18 years of age and represented about one-fifth of the total number of women 18 years of age and over classified as questionable cases. Three of these women were known to have had 2 illegitimate children each, and one had had 3. Twelve of the persons of questionable mentality were themselves illegitimate.

The 88 persons of questionable mentality who had delinquency records or who were known to be delinquent, immoral, or uncontrollable constituted nearly one-fourth of the total number of individuals of questionable mentality enumerated, and more than one-third of the 241 for whom information as to individual characteristics was secured. Ten of the 88 were cared for temporarily in institutions for delinquents, and the remaining 78 were at large in the community.

These 88 who were delinquent or uncontrollable, the 72 persons of questionable mentality who were not reported as delinquent or uncontrollable but who were living in homes where proper care and safeguarding were impossible, and the 5 who were temporarily cared for in institutions for delinquents made a total of 165, or 46 per cent of all the persons of questionable mentality enumerated. They constituted more than two-thirds of the questionable cases for whom detailed information was secured. These facts indicate unmistakably the need for adequate mental examination and social investigation of such cases in order that care and training adapted to their condition may be provided for them.

SUMMARY OF FINDINGS AND CONSTRUCTIVE MEASURES NEEDED.

A total of 175, or 82.5 per cent, of the cases studied were in need of public supervision or institutional care. Ninety-five of these were at large in the community in immediate need of special care and protection, 68 were in institutions not designed for their care, and 12 were provided for only temporarily in an institution for the feeble-minded.

A study of individual cases of mental defectives reveals in a striking way the coincidence of mental defect and poverty, abnormal home conditions, neglect, and dependency. A majority of the mental defectives were found in an environment making normal standards of living impossible.

Eighty-three, or 39 per cent of the total number, were living under adverse home conditions—extreme poverty, alcoholism, immorality,

or entire lack of home protection. An additional 68, or 32 per cent, were in institutions not adapted to their needs, making a total of 71 per cent living under conditions where adequate care and protection were impossible or provided for only temporarily in institutions designed to care for other classes.

That society must provide special protection for mental defectives is strongly indicated by the fact that 98 of the total number studied had delinquency records or were immoral or difficult to control. Seventy-nine of these were living under adverse conditions or in institutions not adapted to their needs, while 7 were in an institution for the feeble-minded, and 12 were living in good homes.

The problem of those requiring special care and training because of subnormal mentality is not limited to the 212 positive cases of mental defect included in this study. The 361 individuals classified as of questionable mentality undoubtedly included a number who were actually mentally defective. All of them presented problems of retardation or abnormality. More than one-third of the questionable cases for whom information as to individual characteristics was secured were known to be delinquent or uncontrollable. A total of two-thirds of those for whom detailed data were obtained were in homes where proper care and safeguarding were impossible, or had already developed antisocial tendencies.

Delaware has an unusual opportunity to work out a well-rounded program of adequate provision for all classes of mental defectives. It is a small State, and, having no established system of care, is free to utilize to the fullest extent the experience of other States.

Any program for adequate provision for mental defectives must have as its central feature institutional provision. The data gathered in this investigation furnish evidence as to the imperative need for institutional care and training for defective individuals who can not be given proper care, training, and protection in the community and for those who are a menace to the community by reason of delinquent tendencies. A large number of cases need permanent custodial care. But institutional care alone can not meet the whole problem of provision for mental defectives. The institution should serve as the focus for the various activities necessary for the proper care of the feeble-minded.

Facilities for mental examination and diagnosis available to all sections of the State are essential and might be provided by a system of clinics held in various parts of the State at regular intervals by the institution psychiatrist, in cooperation with the schools and other existing agencies. The need for mental examinations is indicated by the fact that more than 1,100 persons in New Castle County were reported to the investigators as possibly feeble-minded. Facilities for

mental examinations are particularly needed for proper treatment of delinquent and dependent children. They are requisite also for classification of children in the schools.

An essential part of the improvement of the school system of Delaware is special provision for retarded children, taking into account the reason for their backwardness—bad physical condition, lack of opportunity, or actual mental defect. The State educational authorities have repeatedly called attention to the seriousness of the problem of retardation in the schools and the necessity for more adequate compulsory education laws and better school equipment. In towns where the school system is large enough to make it practicable special classes should be developed which would provide industrial training and other instruction adapted to the needs of those mentally defective children who can safely remain in the community and would make it unnecessary to remove them to an institution for training.

The place of the special class in the program of public care for defective children has been demonstrated by the experience of a number of cities where such classes have for several years been part of the public-school system. Dr. George L. Wallace, superintendent of the Wrentham State School for the Feeble-minded, in a recent address,¹ said:

With the extension of this movement for special classes, until every school system of any size has a sufficient number to accommodate all children with mental defect, it would seem that the larger number of children with ordinary mental defect could be safely protected and educated in the community.

It is coming to be recognized that the expense to the State of institutional provision can be much reduced and greater justice done to individuals by a system of parole of certain classes of mental defectives who have been trained in an institution and by supervision through an out-patient department of those defectives who can be given proper care and training in the community. Such out-patient work could be carried on in cooperation with the schools and other agencies coming in contact with the problem. This method of parole and supervision in the community of certain types of mental defectives is being advocated by some of those most experienced in the care of the feeble-minded. Mr. Alexander Johnson speaks of the importance of the practical movement for the after-care of certain classes of the feeble-minded who have been trained in the schools.² Dr. Wallace, in the eighth annual report³ of the Wrentham State School, says:

Boys and girls whose mental and moral defectiveness is not extreme, who have profited by a period of institutional education and care, who have perhaps been tided

¹ Annual Conference of Massachusetts Society for Mental Hygiene, Boston, Mass., Dec. 13-15, 1916. "The type of feeble-minded who can be cared for in the community." Published in *Ungraded*, vol. 2, No. 5 (February, 1917), p. 105, and, in part, in *Mental Hygiene*, vol. 1, No. 2 (April, 1917), p. 291.

² "The feeble-minded," *The Survey*, vol. 37, p. 361 (Dec. 30, 1916).

³ Wrentham (Mass.) State School, Eighth Annual Report, for the year ending Nov. 30, 1914, p. 15.

over a few critical years of their life—these we are reasonably hopeful may do fairly well in the community provided we carry institutional provision to them in the form of a good visitor, while also having them report to the institution at certain periods. I believe this is one method whereby a school for the feeble-minded can extend its work and bring a larger number of feeble-minded under supervision than can be maintained within the institution grounds.

The possibility of caring for mental defectives in the community is brought out in the recent report of the Indiana committee on mental defectives, which speaks of the "value and far-reaching importance of community care."¹ The need for supervision in the community was emphasized at the last annual conference of the Massachusetts Society for Mental Hygiene. Dr. Walter E. Fernald, in an address on "What is now practicable in the way of protection, education, supervision, and segregation of the feeble-minded,"² said:

There is now needed something between permanent segregation and no care. We may be able to distinguish between those who can go out into the community and those who must stay in an institution. * * * The ideal should be segregation for those who need it and supervision in the community for those suitable for community life.

Defective individuals are found in all ranks of society and under all varieties of conditions; they become community problems when they develop antisocial tendencies or when they are without proper care or control because of poverty or detrimental home conditions. Without a system of mental examinations and supervision in the community the higher grade mental defectives are not usually recognized as such until they have become socially troublesome. A comprehensive program, including mental examinations, special classes, and supervision in the community, as well as institutional provision, would result in the greatest benefit to the defective individual and to the community and would reduce the social burden of delinquency and degeneracy.

¹ Mental Defectives in Indiana. Report of Committee on Mental Defectives, Indianapolis, Ind., Nov. 10, 1916, p. 6.

² Annual Conference of Massachusetts Society for Mental Hygiene, Boston, Mass., Dec. 13-15, 1916. Paper as yet unpublished.



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U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

CARE OF DEPENDENTS OF ENLISTED MEN IN CANADA

BY

S. HERBERT WOLFE



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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, D. C., May 26, 1917.

SIR: The following report especially authorized by you upon the care given to the dependents of enlisted men has been prepared by an actuary of recognized authority, Mr. S. Herbert Wolfe, of New York, who visited Canada for that purpose. Mr. Wolfe discusses especially public provisions. In general, the methods described by him are capable of extension and adaptation into a complete system. The provision for the insurance of the lives of soldiers is unique. It is important to enlist the skill of experts on the various social and economic matters involved, and such skill is absolutely indispensable if the development of an insurance system is undertaken.

In the 50 years since the Civil War, legislation affecting the family and its economic status has shown marked growth. Mothers' pension laws and minimum-wage laws are recognized examples, and it is acknowledged that their result has not been to pauperize but distinctly to improve the power of the family to protect itself. In view of this tendency it is to be expected that a system of compensation for soldiers and sailors can be developed whereby the Government will make possible for their children the home life and parental care which are the common need of every child.

This report is accompanied by appendixes containing copies of laws, orders, forms, etc., used in Canada in connection with the care of Canadian soldiers and their dependents.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

Hon. WILLIAM B. WILSON,
Secretary of Labor.

CARE OF DEPENDENTS.

The existence of an army in time of war not only brings with it the necessity of looking after the needs of the combatants but also presents an economic problem in that their dependents must be shielded from any undue hardships caused by the military service of the breadwinner.

The clear intent running through the recently enacted draft legislation is to exempt from service those between the ages of 21 and 30 "in a status with respect to persons dependent upon them for support." Theoretically this should dispose of the dependency problem, but in practice relief will have to be provided from some sources—either governmental or private—if the physical suffering of the dependents is to be prevented. For example, at the present time the civilian relief committee of the New York County Branch of the American Red Cross is looking after 110 families, dependents of enlisted men in the United States Army, United States Navy, and one of the National Guard regiments; in the last-named organization the colonel has made application for the discharge of some of those who have dependents but as yet no final action has been taken, and in the meantime relief must be given to those requiring it; in all likelihood the necessity for this relief will continue, for some of the national guardsmen having dependents will not be discharged, and no discharge is contemplated for the enlisted men of the Regular Army and the Navy. In all probability that condition will be duplicated in other localities, and, unless our experience is exceptional, dependents not existent or forgotten at the moment of enlistment will make their appearance from time to time; they can not be ignored or neglected, and some provision must be made for them.

The war in which we are now engaged was begun nearly three years ago, and in consequence the experience of the other participants will be of value to us. It becomes advisable, therefore, to consider the methods adopted by them in caring for dependents of enlisted men.

It may be stated as a broad general proposition that every other nation in the war grants benefits in varying degrees to dependents (the destruction of property in Belgium and the occupation of her territory by the enemy has temporarily halted her efforts), but the

standards of living differ so radically from ours in nearly all of them that we can derive but little benefit from a study of their methods. In Canada, however, we find a situation more nearly comparable to our own, and it will be of interest, therefore, to examine the system followed there.

In Canada the assistance received by the dependents of officers and enlisted men in the expeditionary force may be considered under two divisions:

- I. Benefits payable while in service.
- II. Benefits payable after discharge.

DIVISION I. BENEFITS PAYABLE WHILE IN SERVICE.

The dependents of an enlisted man while he is in the service will receive assistance from four sources.

A. *Assigned pay*.—Enlisted men are required to assign at least one-half of their pay (not including the field allowance) at the time of their enlistment and are permitted to assign not more than 20 days' pay in each month. The assigned pay of a private receiving daily pay of \$1 amounts, therefore, to \$15. The assignment is made by an order obtained at the time of enlistment upon a blank form which is then filed with the appropriate branch at militia headquarters, Ottawa, and automatically the portion of the pay indicated is sent to the dependent each month by that branch.

In order that an idea may be obtained of the pay and allowances of the Canadian expeditionary force, the amounts are set forth in detail in Appendix I.

Officers are not required to assign any definite part of their pay.

B. *Separation allowance*.—In addition to the assigned pay referred to in "A," the dependent becomes entitled to further governmental assistance in the form of a separation allowance which has been granted by the Canadian Government to the dependents of volunteers serving in the Canadian overseas contingents, as follows:

	Per month.
Privates.....	\$20
Sergeants.....	25
Warrant officers.....	30
Lieutenants.....	30
Captains.....	40
Majors.....	50
Lieutenant colonels.....	60

It will be noted that this is a flat allowance irrespective of the needs of the beneficiary. The childless wife and one with a number of children will both receive the same separation allowance. This is handled in what would seem to be a more logical manner in the British Army, the Imperial Government making a separation allow-

ance to the families of British Army reservists residing in Canada on the following monthly basis:¹

	Private and corporal.	Sergeant.	Color sergeant.	Regimental quartermaster sergeant.	Warrant officer.
Wife only.....	\$11. 66	\$11. 66	\$13. 52	\$19. 06	\$20. 27
Wife and 1 child.....	15. 38	15. 90	17. 81	23. 31	24. 56
Wife and 2 children.....	19. 06	20. 29	22. 10	27. 65	28. 86
Wife and 3 children.....	22. 86	24. 56	26. 39	31. 93	33. 19
Wife and 4 children.....	25. 78	27. 65	29. 46	35. 01	36. 22

N. B.—The above rates do not include allotments from soldiers' pay. The same idea is carried out in the French and Italian Armies, for the separation allowance is based upon the size of the families. An increase of \$3.08 per month for each additional child is allowed.

C. Life insurance.—In certain localities in Canada families of enlisted men are protected by life insurance the premiums on which are paid by the municipalities in which the soldier resided at the time of his enlistment. These policies have been issued by companies domiciled in the United States (except in Toronto, to which reference is made later), and different methods have been followed for the distribution of benefits. In some localities the proceeds have been payable at once to the beneficiaries of the deceased or to his estate without regard to their necessities, while in other localities the proceeds have been pooled and divided among the beneficiaries who needed the protection. In the city of Toronto, however, about one-fourth of the insurance protection has been issued by insurance companies and the balance is being provided by the city of Toronto itself, which has started an insurance bureau for the purpose. The right of the city to perform this function is granted by clause (f) of section 1 of 5 George V, chapter 37, Statutes of Ontario (see Appendix II of this report), which authorized any municipal corporation to pass by-laws to—

Insure the lives for the benefit of dependents of officers and men, residents of the municipality, who during the present war may be on active service with the naval and military forces of the British Empire and Great Britain's allies.

The city of Toronto passed the necessary by-law and has issued \$2,000,000 of bonds for war purposes, payable in 10 annual installments and carrying interest at the rate of 5 per cent per annum payable half yearly; the charge of principal and interest is a charge upon the general taxpayers of the city. Every officer or enlisted man residing within the city limits who volunteers for overseas service has from the date of his enlistment been protected by a life insurance policy of \$1,000, the protection running from the time of his enlistment to his death or six months after his discharge or resignation. Application for this protection is made upon a blank form (Appendix

¹ Although the payment is made on a weekly basis, the monthly equivalent is given.

III), and at the time of investigation (May 14, 1917) the issued insurance was divided as follows:

State Life Insurance Co. (Indianapolis).....	\$262, 000
Aetna Life Insurance Co. (Hartford).....	1, 100, 000
Metropolitan Life Insurance Co. (New York).....	8, 638, 000
Carried by the city of Toronto.....	32, 297, 000
Total.....	42, 297, 000

Originally the city planned to obtain all of this coverage from duly organized insurance carriers, and the minutes of council authorizing such coverage and the terms of the same are set forth in detail in Appendix IV. The policies were issued without medical examination other than the examination made by the military authorities at the time of enlistment. The mortality experience led the companies to decline to continue further coverage on the same basis, and in consequence the city itself has issued the large amount of protection indicated. The following death claims to the date of investigation have been paid:

State Life Insurance Co.....	\$8, 000
Aetna Life Insurance Co.....	88, 000
Metropolitan Life Insurance Co.....	712, 000
City of Toronto.....	930, 000

An interesting modification of the usual practice of insurance companies has been required by the exigencies of the service, and all companies transacting life-insurance business in Canada are required to accept official certificates of death or presumption of death issued by the Department of Militia and Defense as satisfactory proof of death of the insured under any policy of life insurance issued on the life of an enlisted soldier resident in Canada at the time of enlistment; if such policyholder should subsequently prove to be alive and the beneficiary fail to refund the amount of the payment to the company, the company is reimbursed by the Dominion Government by payment out of the consolidated revenue fund under the provisions of the war appropriation act to the extent by which the amount of such payment made to the beneficiary exceeds the actuarial reserve maintained by the company at the date of the payment. (Appendix V.) The form of the certificates of death and assumption of death are shown in Appendix VI.

In order to protect itself against improper payments the city of Toronto requires each beneficiary to execute an undertaking (Appendix VII), agreeing that in the event of the insured being alive, or on it being shown that he was not a resident of the city of Toronto, a refund will be made. It is interesting to note that while at first the city paid the principal sum to the beneficiary in one sum, it soon became evident that such a course was inadvisable and led to extravagant and ill-considered disbursements. At the present time, therefore, an investigation of the circumstances of the dependents is made by a committee of officials which recommends how the amount

should be paid; in most cases the amount is paid in monthly installments of \$30 each, and the city allows interest at the rate of 4½ per cent per annum on the unpaid balance. In exceptional cases, however, this rule is modified, and if the beneficiary require the principal sum to pay off or reduce a mortgage or to enable her to be placed in funds to start in business the entire amount is paid at once.

So far only one action has been brought against the city. This was the case of a soldier who worked in the city but who did not live within its limits. Although the policy had been issued, the city claimed under the contract that no contractual relations existed, as it was not the intention of the city or the insurance company to accept nonresidents, and therefore the issuance of the policy was in error. The court sustained the contention of the city officials and no appeal has been taken.

At the present time it is impossible to obtain any reliable mortality statistics, as no record has been kept of the amounts exposed.

D. Canadian Patriotic Fund.—This organization was incorporated in August, 1914, by the Dominion legislature (Appendix VIII) for the purpose of "rendering financial assistance to the dependent relatives of men engaged on active service with the military and naval forces of the British Empire and its allies." It is intended that this assistance shall be given to families who are in need of it and whose income from all sources (including the assigned pay and separation allowance) is insufficient to enable them to live according to a standard which would produce a reasonable amount of comfort, although not necessarily upon a scale identical with that which existed before the soldier left his family.

Although the various activities of the Canadian Department of Militia work in harmony with the fund and furnish it promptly with the necessary data for its successful administration, the Government neither directs nor exercises any control over the disbursements, although the auditor general of Canada audits the accounts annually. The funds are supplied from three sources:

- (a) From voluntary contributors.
- (b) From annual grants made by some of the Provinces of Canada.
- (c) By grants from cities, counties, and similar political subdivisions.

The authority for the payments by (b) and (c) is obtained by 5 George V, chapter 37 (Appendix II of this report), 6 George V, chapter 40 (Appendix IX of this report), and 7 George V, chapter 41 (Appendix X of this report).

The head office of the fund at Ottawa has made a careful survey of the financial conditions surrounding each town and county in the Dominion and, after preparing a budget of probable disbursements, has assigned to each of these divisions the amount which ought to be raised by it. The actual raising and collecting of the funds is in

the hands of local bodies or committees. For example, the association having jurisdiction over the administration of the fund in Toronto is known as "The Toronto and York County Patriotic Fund Association." These local associations adopt such rules as appear necessary for the proper administration of their trust; and the fund, by thus placing the administration in the hands of those familiar with the needs of the beneficiaries, has succeeded in having the fund administered with an efficient sympathy devoid of all red tape and waste.

In wise recognition of the fact that the cost of living differs in different localities, the head office has provided a standard scale, which, while correct for large cities like Montreal and Toronto, can properly be reduced in those localities where living is less expensive. The schedule in force at the time of investigation is shown in Appendix XI. The practical effect of this schedule is that the wife of a private having three children between the ages of 10 and 15 would receive the following monthly allowance, upon the assumption that he assigned the minimum portion of his pay allowed:

From the assigned pay of the private.....	\$15
As separation allowance.....	20
From the Canadian Patriotic Fund.....	25
Total.....	60

The allowance at this figure continues as long as the soldier remains in the overseas service or until some change in his status or that of the family takes place, such as his change in rank, the death of a child, or the passing of a child beyond the age of 15. By means of visiting committees operating under the jurisdiction of the local associations, supervision over the family is constantly exercised; if it be found that the mother is failing to provide properly for the children or is leading an immoral life or is no longer in need of assistance, the evil is corrected or the payment from the fund is stopped.

With a fine sense of justice the head office has ruled that while the schedule above (Appendix XI) is the normal one which applies to British reservists, it is not intended to apply to those Canadians who are serving with the French, Belgian, or Italian Armies. In those cases the separation allowance is less than that granted by the Canadian Government, and in consequence the grant from the Patriotic Fund to those serving in the armies of the allies is increased to the point where the wife and family are put in possession of a sufficient amount to insure the standard of living which the head office has established as the normal one.

While the local bodies have charge of the soliciting and the collecting of contributions, the officials at the head office counsel with the local authorities, suggest effective means of campaigning, assign skilled organizers to conduct the campaigns, and furnish appropriate advertising literature. Some idea of the extent to which

collections and disbursements have been made from September 1, 1914, to April 20, 1917, may be gathered from the following exhibit:

Receipts in the Dominion of Canada.....	\$22, 981, 615. 51
Disbursements.....	16, 875, 634. 32

Amount on hand for future distribution.....	6, 105, 981. 19
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The contributions reflect the size of the localities, their population, their prosperity, and the intensiveness with which the campaigns have been conducted. An idea of the amounts collected from the start of the fund to April 30, 1917, by four localities taken at random can be gathered from the following schedule:

Locality.	Receipts. ¹	Disbursements.
Prince Edward Island.....	\$120, 512. 40	\$42, 600. 00
Montreal.....	5, 040, 245. 09	1, 878, 338. 10
Toronto.....	3, 885, 802. 14	3, 050, 619. 57
Nipissing.....	56, 951. 62	44, 869. 34

¹ The amounts shown in this column represent the amounts which have been collected and forwarded by the branches to the head office. They do not represent the amounts which have been collected by the branches and being held there, or the amounts which have been pledged by the different communities.

In Toronto, for instance, three campaigns were made, one in September, 1914, which raised about \$1,000,000, the subscriptions providing that payments were to be made in five installments, the first at the time of subscription and the subsequent ones each 6 months for 24 months; the second campaign, in January, 1916, raised about \$2,500,000, payable one-tenth at once and one-tenth upon the first of each succeeding 9 months; the third campaign, started in January, 1917, raised about \$3,300,000, payable in the same way as the second campaign. It will be seen, therefore, that the total subscriptions amounted to practically \$7,000,000, although the amount shown in the receipt column above is about one-half of that figure, due to the fact that most of the 1917 subscriptions have not yet been received.

The Montreal branch shows a financial statement as of March 31, 1917, equally as remarkable and indicative of the results which may be obtained by intensive work, as follows:

Campaign 1914, subscriptions and pledges.....	\$1, 615, 906. 16
Campaign 1916, subscriptions and pledges.....	2, 506, 784. 04
Campaign 1917, subscriptions and pledges.....	3, 823, 395. 19
Total subscriptions.....	\$7, 946, 085. 39
Interest on bank deposits.....	77, 854. 50
Total receipts.....	8, 023, 939. 89
Deduct:	
Expended in relief.....	\$1, 741, 277. 96
Administration expenses.....	58, 560. 00
Remitted to Ottawa.....	1, 015, 338. 02
	\$2, 815, 175. 98
Balance.....	5, 208, 763. 91

One thing must be carefully borne in mind. While the local bodies collect the funds they do not disburse the collections which they have made, for after being deposited in the bank the funds are subject to withdrawal only upon the authority of the head office. Each month the local body forwards to the head office a requisition sufficiently large to cover its estimated budget for the next month, and, if approved, the head office places to the credit of the local body the amount asked for and from this account the local bodies issue checks to the beneficiaries. On or before the 15th of the following month a detailed statement of disbursements is submitted, showing the payments made to the beneficiaries and giving all of the data necessary to enable the head office to check completely the disbursements. By this effective supervision the greatest economy of administration has resulted, which, combined with the unselfish services of public-spirited men and women, has enabled the fund to meet all of its administration expenses by the interest which has been allowed upon the deposits by the banking institutions. Practically every cent collected from contributors, therefore, has gone or will go to the relief of dependents and none has been spent for administrative purposes.

The Canadian Patriotic Fund and its method of administration would seem to have had a beneficial effect upon every side of Canadian life which it has touched. It has furnished a great incentive to enlistment, as cases in which men have come to the local office of the fund to inquire what the fund will do for their families should they enlist have been so frequent as to justify the belief that no small part of the patriotic response to the call for enlistment upon the part of the Canadians can be traced to the fund; it has benefited the soldier in the field, for its existence enables him to enjoy the peace of mind which comes from knowing that his dependents are looked after while he is away; it benefits the family who receives the grant, not only from the point of view of intensive welfare work, but also because the beneficiaries are made to realize that the Canadian Patriotic Fund grant is not a charity but represents the amount which is justly theirs while the breadwinner is fighting for his country; it benefits those who contribute, for it enables them to feel that even though they can not be on the firing line they are performing a service to their country; and lastly, it benefits those who are engaged in the administration by permitting them to enjoy the elevating influence attached to this form of social service work.

DIVISION II. BENEFITS PAYABLE AFTER DISCHARGE.

In a broad general way it may be stated that the benefits payable to dependents after the discharge of the enlisted man arise from two sources only.

A. Pension payments.—In dealing with the subject of pensions the term “discharge” used above is intended to include the payments which will be made to dependents, not only upon the death of the enlisted man in action, but as a result of disability received at that time but not causing his death until after his discharge. A proper consideration of this matter necessitates a general view of the pension system in vogue in Canada. The scale of pensions at present in use is as follows:

	Yearly.
Rank and file.....	\$480
Squad, battery, or company sergeant major.....	510
Squad, battery, or company quartermaster sergeant.....	510
Color sergeant.....	510
Sergeant.....	510
Staff sergeant.....	510
Regimental sergeant major, not warrant officer.....	620
Master gunner, not warrant officer.....	620
Regimental quartermaster sergeant.....	620
Warrant officer.....	680
Lieutenant.....	720
Captain.....	1,000
Major.....	1,280
Lieutenant colonel.....	1,560
Colonel.....	1,890
Brigadier general.....	2,700

The administration of pensions is intrusted to the board of pension commissioners, consisting of three members appointed by the governing council.

Those who are entitled to be awarded pensions are divided into six classes as follows:

Class.	Degree of disability.
1.....	100 per cent.
2.....	80 per cent and less than 100 per cent.
3.....	60 per cent and less than 80 per cent.
4.....	40 per cent and less than 60 per cent.
5.....	20 per cent and less than 40 per cent.
6.....	Under 20 per cent.

In addition to the above, if the disabled man held no commission higher than a lieutenant and requires an attendant to look after his physical wants, a further yearly allowance is made of an amount not exceeding \$250; an allowance is made of certain payments for each child (boys until the age of 16 and girls until the age of 17, or if owing to mental or physical infirmity the child is incapable of earning a livelihood, the payments are continued to age 21). In actual operation it has been found that the six classes shown above were not sufficiently elastic to cover the cases which were presented, and in the near future a scale of benefits similar to those indicated in Appendix XII will be adopted.

The question of determining the degree of impairment is of course important, and the advisability of adopting a standard scale is obvious; for in that way only can uniformity of treatment be obtained by the various medical examiners in different localities before whom cases come. The full table of disabilities is shown in Appendix XIII, from which the following typical items are taken:

	Per cent.
Epilepsy, fits occurring several times per day.....	100
Epilepsy, fits occurring every 2 or 3 weeks.....	50
Loss of 1 eye.....	33
Loss of tongue.....	60
Loss of 1 hand.....	70
Loss of 1 arm above elbow.....	75
Loss of 1 foot.....	60
Loss of both feet.....	100

Loss of life is of course considered as total disability, 100 per cent, and in that case the following regulation applies:

If a member of the forces has been killed or has died as the result of injuries received, or disease contracted or aggravated while on active service, the widow, until remarriage, shall be entitled to the equivalent of the pension in Class 2, and also be entitled to draw the allowance for children. On the remarriage of the widow her pension shall cease but she shall be entitled then to a gratuity of an amount equivalent to one year's pension.

The amounts payable to widowed mothers, orphaned children, and other relations of course differ from those paid to the widow, and the amounts payable will be found set forth in full in Appendix XIV, which deals with the present pension system in Canada.

It may be noted in passing that the entire pension scheme is based upon the theory that it is the duty of the citizen to offer his services to the state and that he brings to the state a sound mind and healthy body and is paid in respect to the disability suffered as such. No attempt is made to compensate the disabled soldier for inability to follow his profession before he enlisted. The same benefit is payable to a postman and to a telegraph operator for the loss of both legs.

Many complaints have been made of the pension scale, and in all probability it will have to be raised. The original system was based on an average earning power and estimated expenditure of a man with three children who would require \$700. It will be noted that this amount is equaled by the yearly pension of \$480 paid to a private, together with an allowance of \$6 a month for each of the three children, the total being \$696. It has likewise been felt that an error was committed in restricting the allowance for children to classes 1, 2, and 3, and in the new schedule in all probability the allowance for children will vary with the degree of disability.

B. Payments during reeducation.—A Military Hospitals Commission has been organized, consisting of about 20 members who serve without pay and are appointed by the Federal Government in addi-

tion to 9 ex officio members who are representatives of the provincial governments. The incapacitated soldier from overseas is met on his arrival by a representative of the commission, who attends to all of the legal formalities (procuring of documents, etc.) in connection with his arrival and in conjunction with the proper medical and military authorities sees that the disabled soldier is received in the hospital, home, or sanatorium which is best calculated to provide him with the most efficient medical treatment. The paramount idea is to restore the soldier to a condition of health which will permit of his becoming a useful member of society. While he is under the supervision of the Military Hospitals Commission the soldier is in receipt of his regular pay and the family still continues to enjoy the assigned pay, the separation allowance, and patriotic fund assistance, if any. Before being evacuated from the hospital and discharged from the service his case has been passed upon by the board of pension commissioners and arrangements are made so that the first pension installment is paid to the man the day that he is discharged. While he has been undergoing medical treatment his case has been studied in an endeavor to reduce his disability to a minimum before he is discharged; when that takes place he is pensioned, if entitled to a pension, and if he is unable to follow his previous occupation he is trained for a new one.

In each of the districts there is a vocational officer, whose duty it is to keep track of the man. If it is found necessary to teach him a new trade, he is surveyed by a disabled soldiers' training board on which the vocational officer, a medical officer, and a representative of the provincial employment commission sit. The recommendations of this board are forwarded to the Military Hospitals Commission, and, if the recommendation be approved, a course of instruction is outlined for the pensioner; while undertaking the course he is in receipt of the pension, is allowed \$8 a month spending money by the commission, is given his maintenance at one of its institutions, or in lieu thereof if he lives at home is allowed \$1 a day. Should he be a married man there is a further allowance made to his wife, consisting of the difference between \$35 a month and the amount of the pension paid to him. The commission also makes an allowance for each child (boys up to the age of 16 and girls up to 17), as follows:

If the children are 10 years of age or over, \$7.50 for the first child, \$4.50 for the second child, and \$3 for each of the other children.

If the children are below the age of 10 but over 5, the amounts are \$4.50 for the first child and \$3 for subsequent children.

If all the children are below the age of 5, \$3 is allowed for each child.

A maximum allowance of \$55 a month for the wife and children (from which is deducted the amount of the pension of the man and his children) is allowed, so that a man undergoing vocational training

with a wife and six children might get the following monthly allowances:

Amounts indicated above.....	\$55
Spending money allowance.....	8
Maintenance allowance.....	30
Total.....	93

From the first item would be deducted whatever pension he was receiving. This payment is made irrespective of his rank.

It not infrequently happens that enlisted men have returned from overseas and when cured have been discharged. Subsequently it has been found that the man could not work at his usual trade, and the family would suffer hardships in consequence. There was no machinery by which the Canadian expeditionary force could reattest (reenlist) him. It became necessary, therefore, to procure an order in council empowering the Military Hospitals Commission to reenlist the man for *treatment* instead of for service. In those cases the man's pay starts from the date of his reattestation, but if he is a pensioner his pension ceases from that date.

As pointed out in the early part of this report, all of the nations at war have provided some form of relief for the dependents of the enlisted men. It is a matter intimately connected with the welfare of the soldier and his wife, but it is absolutely necessary to the minor children. If we are to minimize the bad effects upon future generations of the hardships which are inevitably connected with the war, we must take the necessary steps to throw every possible safeguard around the dependents of the combatants.

From the outline of the Canadian system of relief shown above some idea may be obtained of the angles from which this question must be considered, and in this connection it must be realized that it is just as necessary to prepare a scientific pension plan at this time as it is to provide relief for physical suffering. We have become accustomed to the use of the term "pension," but in reality the benefits which we aim to grant by this form of relief are closely akin to the compensation protection which covers industrial workers in practically every State in the Union. No good reason exists for failure to recognize the fact that the soldier in the trenches and the civilian worker in a munition plant are on an equality when the question of protection to their dependents is at issue. If we provide that in the event of the death or injury of the munition worker his family shall receive benefits for a certain period, ought we deny to the family of the soldier a similar measure of protection? There is an equal necessity for placing the compensation benefits or "pensions" of the soldier upon a scientific basis as in the case of the compensation laws applicable to the industrial worker. Every feeling of gratitude and humanity dictates that a satisfactory—even

liberal—allowance shall be made to the disabled soldier and his dependents, but sentiment and generosity must be considered when the plan is formulated and not when individual cases are passed upon. The latter course must inevitably lead to discrimination, unequal and unfair awards.

Every avenue of information in Canada was open to me by the Government officials and the private individuals in charge of the various phases of the work. They gave generously of their time and seemed imbued with the idea that they should do all in their power to prevent us making the mistakes which they did. It is manifestly impossible to make suitable acknowledgment of their assistance and courtesies in this report, but attached hereto is a list of those who gave me much information.

S. H. WOLFE.

MAY 28, 1917.

101899°—17—3

FROM WHOM INFORMATION WAS OBTAINED.

GOVERNMENT BUREAUS.

ASSIGNED PAY AND SEPARATION ALLOWANCE.

Mr. R. B. Borden.

Maj. Ingall (general auditor and chief inspector of accounts).

Maj. J. W. Margeson (president board of review of separation allowances).

Lieut. R. A. Shaw.

Mr. W. F. Kelly.

MILITARY HOSPITALS COMMISSION.

Mr. E. H. Scammell, secretary.

Mr. Frederick H. Sexton, vocational officer.

Mr. Howard Angus Kennedy.

BOARD OF PENSION COMMISSIONERS.

Maj. J. L. Todd.

Mrs. Rachael K. Ross.

INSURANCE DEPARTMENT.

Mr. George D. Finlayson, superintendent.

MEMBERS OF PARLIAMENT.

Sir Herbert B. Ames.

Hon. William F. Nickle.

CANADIAN PATRIOTIC FUND.

Sir William Mulock, K. C. M. G.

Mr. Angus MacMurchy.

Mr. William C. Noxon.

Miss Helen R. Y. Reid, convener of the Montreal branch.

Mr. John Watt.

Mr. Graydon Butler.

Mr. R. J. Dilworth.

Mrs. R. S. Wilson, regent, Daughters of the Empire.

Mr. Philip H. Morris, secretary.

Lieut. Col. Clarence F. Smith.

CANADIAN RED CROSS SOCIETY.

Lieut. Col. Noel G. R. Marshall.

OFFICIALS OF THE CITY OF TORONTO.

Mr. William Johnston, city solicitor.

Mr. Thomas Bradshaw, commissioner of finance.

Mr. G. R. Moore, secretary of the insurance department.

MISCELLANEOUS.

Sir William Ralph Meredith, chief justice of Ontario.

Lieut. Col. Vincent Massey.

PAY AND ALLOWANCES.

In Canada there is no Headquarters or Divisional Staff, Canadian Expeditionary Force.

STAFF IN ENGLAND.

TABLE 1.	Staff pay.	Field allowance.
Major General, Commanding Division.....	\$20.00	\$4.00
Brigadier General, Commanding Training Division.....	12.00	3.00
Brigadier General, Staff, Infantry, and Artillery Brigades.....	10.00	2.00
General Staff Officer, 1st Grade.....	10.00	3.00
Assistant Adjutant and Quartermaster General of Division.....	10.00	3.00
Director of Medical Services.....	10.00	3.00
Director of Pay and Record Services.....	10.00	3.00
Assistant Quartermaster General.....	9.00	3.00
Principal Medical Officer (Army Corps).....	9.00	3.00
Chief Paymaster.....	9.00	3.00
Director of Recruiting and Organization.....	9.00	3.00
Officer in Charge of Records.....	9.00	3.00
Director of Veterinary and Remount Services.....	9.00	3.00
Director of Supplies and Transport.....	9.00	3.00
General Staff Officer, 2nd Grade.....	8.00	2.00
Commandant and Chief Instructor of Training Schools.....	8.00	2.00
Deputy Director of Medical Services.....	8.00	2.00
Assistant Director of Medical Services of Division.....	8.00	2.00
Paymaster in charge Overseas Base.....	8.00	2.00
Chief Ordnance Officer, England.....	8.00	2.00
Quartermaster General.....	7.00	2.00
General.....	7.00	2.00
Paymaster in England.....	7.00	2.00
Divisional Surgeon.....	7.00	2.00
Divisional Storekeeper, Bramshott, etc.....	7.00	2.00
.....	7.00	2.00
.....	7.00	2.00
.....	7.00	2.00
Transport.....	7.00	2.00
.....	7.00	1.50
.....	7.00	1.50
.....	6.00	1.50
Training Schools.....	6.00	1.50
.....	6.00	1.50
.....	5.00	1.50
Medical Services.....	5.00	1.50
.....	5.00	1.50
.....	5.00	1.50
Medical Services.....	5.00	1.50
.....	5.00	1.25

Staff in England—Continued.

TABLE 1—Continued	Staff pay.	Field allowance.
Assistant Instructors of Training Schools.....	\$5.00	\$1.25
Assistant Heads of Branches, Pay and Records, Class I.....	5.00	1.25
Assistant Heads of Branches, Pay and Records, Class II.....	4.00	1.25
Armourer Officer.....	4.00	1.25
Aide-de-camp.....	3.00	1.25
(Except the principal Aide-de-camp to General Officer Commanding Canadian Army Corps) who shall receive.....	4.00	1.50
Orderly Officer.....	3.00	1.25
Intelligence Staff Officer.....	3.00	1.25
Staff Lieutenant.....	3.00	1.25

The above rates include all allowances (except rations valued at 42c. per diem), travelling allowance when away from station, and Separation Allowance.

SUBORDINATE STAFF.

The following daily rates of Pay and Field Pay are authorized for Warrant Officers, Noncommissioned Officers and Men appointed to the Subordinate Staff of the Headquarters of an Army, Army Corps, Division, Divisional Artillery, Cavalry or Infantry Brigade, and also for Warrant Officers, N. C. O.'s and Men serving on the Subordinate Staff of an Administrative Office at the Base Overseas and in England, subject to the Establishment authorized:

TABLE 2.	Pay of rank.	Field pay.
Superintending Clerk.....	\$2.00	\$1.00
Deputy Superintending Clerk.....	1.80	.50
Staff Sergeant.....	1.60	.50
Sergeant Clerks.....	1.50	.50
Sergeants.....	1.35	.50
Rank and File Clerks.....	1.50	.25
Other Rank and File.....	Pay of rank.	.25

REGIMENTAL RATES (GENERAL).

TABLE 3.	Pay of rank.	Field pay.
Colonels.....	\$6.00	\$1.50
Lt Colonels.....	5.00	1.25
Majors.....	4.00	1.00
Captains.....	3.00	.75
Lieutenants.....	2.00	.60
Warrant Officers.....	2.00	.30
Quartermaster Sergeants.....	1.80	.20
Orderly Room Clerks.....	1.50	.20
Pay Sergeants.....	1.50	.20
Squadron, Battery, or Company Sergeant Majors.....	1.60	.20
Colour Sergeants or Staff Sergeants.....	1.60	.20
Squadron, Battery, or Company Quartermaster Sergeants.....	1.50	.20
Sergeants.....	1.35	.15
Corporals.....	1.10	.10
Bombardiers or 2nd Corporals.....	1.05	.10
Trumpeters, Buglers, and Drummers.....	1.00	.10
Privates, Gunners, and Drivers.....	1.00	.10
Sappers, Batmen, Cooks, etc.....	1.00	.10

NOTE.—In addition to the above Regimental rates, Officers in Command of a Unit numbering five hundred men or over shall receive Command Pay at the rate of \$1.00 (one dollar) a day. It is not payable to officers in receipt of special rates of Staff Pay under Table (I).

REGIMENTAL RATES (SPECIAL).

OFFICERS, CANADIAN ARMY MEDICAL CORPS.

TABLE 4.	Pay of rank.	Field pay.
Colonels.....	\$8.00	\$1.50
Lt. Colonels.....	7.00	1.25
Majors.....	5.50	1.00
Captains.....	4.50	.75
Lieutenants.....	3.50	.60
Nursing Matrons.....	3.00	.75
Nursing Sisters.....	2.00	.60

CANADIAN OFFICERS ATTACHED TO THE ROYAL FLYING CORPS.

TABLE 5.	Consolidated rate of pay.
Squadron Commander (Major).....	\$10.00
Flight Commander (Captain).....	7.50
Flying Officers (Lieutenants).....	6.00

NOTE.—The above rates include Field Pay, Flying Pay, and Ration Allowance.

Lieutenants, on probation previous to qualifying, receive the ordinary rates of Pay laid down in Table (3) plus 50 cents per diem Flying Pay.

FORESTRY UNITS AFTER ARRIVAL OVERSEAS.

TABLE 6.	Consolidated rate of pay.
Millwrights, 2 per Co. of 250.....	\$3.00
Mill Sawyers, 2 per Co. of 250.....	3.00
Edgermen, 2 per Co. of 250.....	2.25
Saw Filers, 2 per Co. of 250.....	2.25
Engineers, 2 per Co. of 250.....	2.25
Log Setters, 2 per Co. of 250.....	1.75
Cooks, 2 per Co. of 250.....	1.75
Saw Hammerers, 1 per 3 Companies.....	5.50

NOTE.—The above rates include Regimental Pay and Field Pay.

SKILLED RAILWAY EMPLOYEES (SECTIONS).

TABLE 7.

In addition to rates laid down in Table 1, Officers appointed to a Section of the Skilled Railway Employees (1 Captain and 2 Lieutenants per Section of 266 Officers, N. C. O.'s and Men) receive \$1.00 per diem Specialists' Pay, and the Noncommissioned Officers and Men a rate ranging from 10c. to \$1.00 per diem on the recommendation of their Officer Commanding, according to the class of work performed, provided they be either Blockmen, Shunters, Drivers, Firemen, Fitters, Tubers, or Blacksmiths.

ALLOWANCES.

SUBSISTENCE ALLOWANCE (IN LIEU OF QUARTERS AND RATIONS).

From the date of enlistment, Officers, Noncommissioned Officers and Men are provided in addition to their pay of rank (or staff pay) and field pay with all their requirements, lodgings, rations, medical care, etc., Noncommissioned Officers and men are also issued with clothing and equipment. Officers provide their own clothing and equipment and receive an allowance in lieu, vide Table 15.

In some cases, however, it is not convenient nor practicable to provide lodgings and rations; certain allowances in money are paid instead, either to the soldier himself or to those providing the maintenance, at the following rates:

ALLOWANCE IN LIEU OF RATIONS AND QUARTERS IN CANADA.

TABLE 8.

	Per diem.
Officers, irrespective of rank.....	\$1. 50
Noncommissioned Officers and men, actual cost per capita not exceeding.....	. 60

IN ENGLAND.

TABLE 9.	At London per diem.	Elsewhere per diem.
Field officers.....	\$2. 00	\$1. 50
Other Officers.....	1. 50	1. 00
Warrant Officers, Class I.....	1. 25	1. 00
N. C. O.'s and Men.....	1. 00	. 75

MESSING ALLOWANCE.

TABLE 10.

All Officers and Nursing Sisters, except those in receipt of special rates of Staff Pay, are granted a Messing Allowance of four shillings a day from the date they arrive in England.

TRAVELLING ALLOWANCE.

When Officers, N. C. O.'s, and Men travel away from their station on public service they are provided with Government transport warrants, which they exchange for railway tickets, the railway companies being afterwards repaid direct by the Department for the warrants in their possession.

An allowance as per following scales is authorized to cover hotel expenses and meals on train:

IN CANADA.

TABLE 11.	East of Port Arthur.	West of Port Arthur.
Colonels.....	\$6. 00	\$6. 00
Lieut. Colonels.....	5. 00	5. 00
Majors.....	4. 50	5. 00
Captains and Lieutenants.....	4. 00	4. 50
Warrant Officers.....	3. 00	3. 50
N. C. O.'s not below rank of Sergeant.....	2. 00	2. 25
Rank and File.....	1. 70	2. 00

After a stay of seven days in one place the above scale is reduced as follows:

TABLE 11A.

TABLE 11A.	East of Port Arthur.	West of Port Arthur.
Colonels and Lt. Colonels.....	\$3. 00	\$3. 50
Majors.....	2. 50	3. 00
Captains and Lieutenants.....	2. 25	2. 75
Warrant Officers.....	1. 75	2. 50
N. C. O.'s not below rank of Sergeant.....	1. 50	2. 25
Rank and File.....	1. 00	1. 75

IN ENGLAND.

TABLE 12.

	Shillings per diem.
Officers.....	15
N. C. O.'s and men.....	5

IN FRANCE.

TABLE 13.

	Francs per diem.
Officers.....	12
N. C. O.'s and men.....	8

SEPARATION ALLOWANCE.

To provide for the needs of the dependents of soldiers, Separation Allowance is paid at the following rates:

TABLE 14.

	Per month.
Colonels and Lieut. Colonels.....	\$60. 00
Majors.....	50. 00
Captains.....	40. 00
Lieutenants.....	30. 00
Warrant Officers.....	30. 00
Sergeants and Staff Sergeants.....	25. 00
Rank and File.....	20. 00

Payable from date of enlistment in the Canadian Expeditionary Force.

CLASS OF PERSONS ENTITLED TO RECEIVE SEPARATION ALLOWANCE.

Class "A"—Wives and Children:

- (1) Lawful wife at time of enlistment.
- (2) Wife married since enlistment with Commanding Officer's consent.
- (3) Wife separated by court, provided court decrees husband must contribute to support.
- (4) Wife separated less than two years without court decree.
- (5) Woman supported by soldier on a permanent "bona fide" domestic basis two years prior to enlistment.

Class "B"—Motherless Children:

- (1) Legitimate children (Payable to Guardian named by soldier).
- (2) Children of soldiers or women as in Class "A" (5) as above.

Class "C"—Widows:

Widow entirely dependent where the son has enlisted and is sole support.

Separation Allowance can not be paid in respect of the same soldier to more than one household at the same time. In the event of individual cases arising which do not appear to come within the above regulations, or any cases not already provided for, such may be specially considered by the Governor General in Council.

ASSIGNED PAY.

Assigned Pay is the portion of a soldier's Pay of Rank retained by his own request or by compulsion and paid to a party designated by him. The amount of the assignment can not exceed twenty days' pay (of rank).

When Separation Allowance is being paid on account of a soldier, it is compulsory for him to assign at least half of his pay (of rank).

In the case of officers assignment of pay is not compulsory.

OUTFIT ALLOWANCES.

OFFICERS.

TABLE 15.

An Outfit Allowance of \$250.00 is authorized for every officer towards the cost of uniforms and equipment, payable as follows:

\$100.00 after three months' service in Canada, \$50.00 on departure for oversea, \$100.00 after arrival in England.

TABLE 16.

Nursing Sisters are also entitled to an Outfit Allowance of \$150.00 under similar conditions to the above, but not to the additional \$100.00 after arrival in England.

WARRANT OFFICERS.

TABLE 17.

Warrant Officers, Class I, who have been duly appointed as such, are entitled to an Outfit Allowance of \$100.00 after arrival in England.

Officers and Warrant Officers provide their own clothing and equipment out of above allowances.

Noncommissioned Officers and Men are issued clothing and equipment in kind.

APPENDIX II.

No. 74.

1915.

BILL.

AN ACT TO AUTHORIZE AND CONFIRM GRANTS BY MUNICIPAL CORPORATIONS FOR PATRIOTIC PURPOSES.

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. Any municipal corporation may pass by-laws for granting aid to—
 (a) The Canadian Patriotic Fund, established by an act of the Dominion Parliament passed in the fifth year of the reign of His Majesty King George the Fifth, chaptered 8.
 (b) The Canadian Red Cross Association.
 (c) The Belgian Relief Fund.
 (d) Any other fund established for providing hospital accommodation, medical or surgical care or other assistance of a like nature to persons who have suffered or may suffer by reason of the present war.
 (e) Provide military outfit and equipment for the members of any local body organized for the purpose of home defence and officially recognized by the Department of Militia and Defence.
 (f) Insure the lives for the benefit of dependents of officers and men, residents of the municipality, who during the present war may be on active service with the naval and military forces of the British Empire and Great Britain's allies.
 (g) Any fund established for the assistance in case of need of the wives, children, and dependent relatives of officers and men, residents of the municipality, who during the present war may be on active service with the naval and military forces of the British Empire and Great Britain's allies.
 (h) To purchase and forward supplies of food and clothing for distribution among those requiring assistance in Great Britain, France, or Belgium.

Objects which may be aided.

2. (1) For the purposes mentioned in section 1 the municipal corporation may borrow money by the issue of debentures, payable in not more than ten years from the date of issue, or on the security of promissory notes, or may provide for raising the money in the estimates and levy for the same in the taxes for the current year. (2) If the money is borrowed on promissory notes and the council decides to extend payment of any of them beyond one year, the notes shall be so drawn and made that the number and principal of the notes falling due in one year shall be equal to the number and principal of those falling due in each of the other years of the term fixed by the council, but so that none shall be for a longer period than five years from the date of the first.

Power to borrow money on debentures or promissory notes.

How promissory notes to be paid.

3. It shall not be necessary to obtain the assent of the electors to any by-law passed under the authority of this Act, or to observe the formalities in relation thereto prescribed by The Municipal Act.

Assent of electors not required.

4. A special rate shall be levied in each year on all the rateable property in the municipality sufficient to pay the instalments of principal and the interest falling due in respect of the debentures or to pay the interest and provide for a sinking fund to retire the debentures at their maturity, or to pay the principal and interest falling due on the promissory notes as the case may be.

Special rates.

Confirmation of
past grants.

5. Any by-law heretofore or hereafter passed for any of the purposes mentioned in section 1, may be approved by the Lieutenant Governor in Council and when so approved shall be legal, valid and binding.

6. Any Public Utility Commission having the management and control of a public utility as defined by The Public Utilities Act may make grants in aid of any of the purposes set out in section 1. Such grants may be made out of any funds under the control of the Commission.

Confirmation of
by-laws.

7. The by-laws set out in the Schedule hereto are hereby confirmed and declared to be legal, valid, and binding.

SCHEDULE.

By-law No. 464 of the Municipal Council of the Corporation of the County of Perth, contributing to the Canadian Patriotic Fund \$1,400 during each month in the years 1915 and 1916, until three months after the present war be ended and has concluded, or until the moneys to be assessed and levied are exhausted, whichever shall first happen.

By-law No. 857 of the Municipal Corporation of the County of Elgin, contributing to the Canadian Patriotic Fund \$1,000 a month during the continuance of the war between Great Britain and Germany.

By-law No. 748 of the Corporation of the County of Victoria to establish and provide a fund to be known as "The County of Victoria Patriotic Fund" and contributing \$16,166.85 to the fund.

A by-law of the Municipal Corporation of the County of Prince Edward, passed on the 18th day of December, 1914, to aid the Canadian Patriotic Fund by a contribution of \$500 a month for a period of not exceeding twenty-four months and to a total amount not exceeding \$12,000.

By-law No. 821 of the County of Ontario to raise money for creating a Patriotic Fund for the relief of soldiers in this County, who have volunteered for service in the present war in which the British Empire is engaged and for the relief of persons dependent upon such soldiers who may have been killed or permanently disabled. Contribution is \$15,000, raised in five annual payments of \$3,000.

By-law No. 2220 of the City of St. Thomas to authorize the issue of debentures to the amount of \$5,000 to be contributed by the City of St. Thomas to the Canadian Patriotic Fund.

By-law No. 658 to authorize the issuing of debentures of the Town of Leamington for \$2,000, for the purpose of the Leamington and Vicinity Patriotic Association.

By-law No. 290 of the Township of King in the County of York to assist in raising a fund for war relief purposes by a levy of one mill in the dollar on all the assessable property in the municipality, which will raise about \$3,500 and \$1,500 by voluntary contributions.

APPENDIX III.

R. No.....

Rec'd.....

By.....

APPLICATION FOR TORONTO CIVIC INSURANCE.

1. Applicant's Name in full.....
2. Occupation.....Employed by.....
3. Address of Employer.....
4. Street Address at time of enlistmentLength of Residence.....years.
5. Exact residence on Aug. 1, 1914Length of Residence.....years.
6. Place of Birth.....County of.....Province or Country.....
7. Date of Birth.....day of.....19....Present age.....years.
8. Name of Next-of-kin or dependents.....
9. Relationship to Applicant.....
10. Address of Next-of-kin or dependent.....
11. Contingent or Unit.....Rank.....Reg. No.....
12. Date of enlistment.....day of.....191..
13. Name of Toronto referee who has not enlisted and who is not likely to enlist.....
.....Street Address.....
14. How long have you known him?.....years.

I declare that all of the foregoing statements are true.

Dated at.....the.....day of.....A. D. 19..

Witness:

.....
(Address.)

.....
(Signature of applicant.)

APPENDIX IV.

To the Council of the Corporation of the City of Toronto:

The Board of Control beg to present their Report No. 5.

INSURANCE OF RESIDENTS OF TORONTO IN THE SECOND CONTINGENT OF THE CANADIAN OVERSEAS EXPEDITIONARY FORCE.

The Board invited offers from the leading life insurance companies having headquarters or chief agents in Toronto for the insurance of residents of Toronto who are enlisted in the second contingent of the Canadian Overseas Expeditionary Force. Two Companies only submitted propositions: First, the State Life Insurance Company of Indianapolis, to insure three hundred members under a Participating Limited Payment or Endowment Policy at the Company's regular rates, with a proviso that the city shall pay two annual premiums in advance; second, the Aetna Life Insurance Company of Hartford, which offered a twenty-year endowment policy of \$1,000 on the life of each member at the regular premium rate, etc.

The foregoing offers were submitted to the City Treasurer and City Solicitor for consideration, etc., and their report thereon is herewith appended and is as follows:

LAW DEPARTMENT,
Toronto, February 6th, 1915.

T. L. CHURCH, Esq. (Mayor),
CHAIRMAN, AND MEMBERS OF THE BOARD OF CONTROL,
Toronto.

DEAR SIR: The question of placing insurance upon the members of the Second Contingent of the Canadian Expeditionary Force was referred to the undersigned by your Board on the 2nd instant.

Only two propositions have been submitted: (1) One by the State Life Insurance Company of Indianapolis, to insure 300 members under a participating limited payment or endowment policy, at the Company's regular rates, with a proviso that the City shall pay two annual premiums in advance; (2) One by the Aetna Life Insurance Company of Hartford, which proposes a 20 year endowment policy of \$1,000 on the life of each member, at the regular premium rate, with a proviso that the City shall pay the premiums on these policies till the close of the present war.

The policies are to be free from restrictions regarding occupation, residence, travel or service in the Militia, Army, or Navy in time of war or in time of peace. Each policy, of course, has a cash surrender value after payment of the third year's premium. At the average age of 30 years this surrender value amounts to \$86, so that men returning from the war after its conclusion will have the option of taking over the policies and continuing the annual payments until the end of the endowment period. If the policies are not continued, the City would have the right to call for the cash surrender value, which we think should be retained by the City as the risk has been carried at the expense of the city during the war. The policies also have a paid-up value at the end of three years. The question, however, of the method of dealing with either the cash surrender value, or the taking of a paid-up policy, is one entirely for the Council.

As this is the only offer that is received, if the City wish to insure we do not see what else there is to do than to accept it. We know nothing about the financial standing of this Company. We presume, however, that, having a license to do business in Ontario, their financial standing must be at least satisfactory to the Insurance Department. Further enquiries may, however, be made before the contract is concluded with this Company.

Yours, truly,

JOHN PATTERSON,
City Treasurer.

WILLIAM JOHNSTON,
City Solicitor.

The Board recommend the acceptance of the foregoing offer submitted by the State Life Insurance Company of Indianapolis subject to the condition that the insurance thereunder shall be placed upon any men enlisting as may be directed by the Board.

Respectfully submitted.

T. L. CHURCH (Mayor), *Chairman.*

BOARD ROOM, TORONTO, *April 6th, 1915.*

A communication from Mr. George B. Woodward, Third Vice President of the Metropolitan Life Insurance Company, was read, as follows:

METROPOLITAN LIFE INSURANCE CO.,
New York, May 1st, 1915.

To the Mayor and Council of the Corporation of the City of Toronto.

GENTLEMEN: In accordance with the agreement reached at the conference held yesterday at our office in this City with representatives of the City of Toronto, we submit the following:

It is understood that the Council of the City of Toronto, or the proper Board, will furnish to the Metropolitan on or before May 30th, 1915, a list of all Toronto members of the first Overseas Contingent, except as to the Reservists. The Metropolitan agrees to at once issue policies on the lives of all persons whose names are on this schedule, and where it has not already issued a policy to the City, the insurance to date and to be in effect from October 14th, 1914.

The City of Toronto is to at once pay to the Metropolitan the difference between the regular premium on the policies (plus extra premium of \$25 in each case), and the amount already paid as such premiums to the Company on account of the insurance of said Contingent, together with interest at 5 per cent per annum on the difference from October 14th, 1914, to date of payment. Payment of this difference may be made by the City in Toronto Bonds to net the Metropolitan not less than 5 per cent, subject to the approval by the Treasurer of the Metropolitan of the particular bonds offered.

The liability of the Metropolitan will be limited to policies issued on the lives of those whose names are certified on said list, and the Metropolitan is not to be called upon to pay on the life of any member of said First Contingent unless the name has been so certified.

The names of the Toronto Reservists are to be similarly certified to the Company, on or before June 30th, and they are to be insured subject to the same conditions as named above applying to the members of the First Contingent; and the Metropolitan is not to be called upon to pay any claim on the life of any Reservist unless the same has been so certified.

The Metropolitan agrees to issue not exceeding 3,700 policies of \$1,000 each on members of the Second Canadian Overseas Contingent, residents of Toronto, subject to the following conditions:

(1) Application for each policy so issued is to be made by the proper officer of the City of Toronto, the application to give all particulars necessary to enable the Company to issue a policy.

(2) In consideration of the agreement of the Metropolitan to insure this additional number of 3,700, the City of Toronto agrees to pay to the Metropolitan the second regular premium on all policies issued on the lives of members of the First Contingent but without the extra war premium, excluding any which may be cancelled on account of noncitizenship.

ILLUSTRATION.

\$1,000.

Average Age 30.

Premium.....	\$42. 07
Amount paid three years.....	126. 21
Cash Value end third year.....	86. 00
Net cost of insurance for 3 yrs.....	40. 21
Cost per year per \$1,000.....	13. 40

To the Council of the Corporation of the City of Toronto:

The Board of Control beg to present their Report No. 10.

RE INSURANCE ON SECOND CONTINGENT.

Your Board have conferred with the local agents of the Aetna Life Insurance Company in the above matter, and have notified the Company that the City will hold them to their contract to insure all the members of the Second Contingent belonging to the City of Toronto.

In the meantime the Board recommend the City Council to declare in favor of the City assuming liability to provide the sum of \$1,000 for the dependents of all soldiers resident in the City belonging to the Second Contingent meeting death in active service.

RE INSURANCE ON SOLDIERS NOT NOW CONNECTED WITH ANY CONTINGENT.

The Board have received the offer hereinafter set forth from the State Life Insurance Company, Indianapolis. The Report of the City Treasurer and City Solicitor is also herewith appended:

STATE LIFE INSURANCE CO.,
Toronto, March 27, 1915.

His Worship Mayor CHURCH, *Toronto, Ont.*

YOUR WORSHIP: I beg to submit, on behalf of the State Life Insurance Company of Indianapolis, the following offer for the insuring of 250 of the volunteers now in camp here.

We will consider two hundred and fifty applications for \$1,000 each on the twenty-year endowment plan, participating in profits, providing three annual premiums are paid in cash in advance, on delivery of the policies to the City.

The rate per \$1,000 at age 26 is \$48.75 per annum, which would mean a payment in advance of \$146.25, covering the three years' insurance. At the expiration of the three years, however, and you desire to surrender the policy you would be entitled to a return of \$90.39 on each \$1,000 policy issued, which, together with the annual dividends which commence with the second year, would bring the net cost to the City down to about \$44 per \$1,000 per man for three years' insurance.

As we are having many enquiries, from outside, we would appreciate if your Council could make it convenient to deal with this offer at once.

Yours, faithfully,

CHARLES T. GILLESPIE.

LAW DEPARTMENT,
Toronto, March 29th, 1915.

T. L. CHURCH, Esq. (Mayor),

CHAIRMAN, AND MEMBERS OF THE BOARD OF CONTROL,
Toronto.

DEAR SIR: We enclose herewith an offer received this morning from the State Life Insurance Company, Indianapolis, to insure 250 of the soldiers now in the camp at the Exhibition Grounds, on the terms set out in the letter.

As this is the only offer that is received, if the City wish to insure we do not see what else there is to do than to accept it. We know nothing about the financial standing of this Company. We presume, however, that, having a license to do business in Ontario, their financial standing must be at least satisfactory to the Insurance Department. Further enquiries may, however, be made before the contract is concluded with this Company.

Yours, truly,

JOHN PATTERSON,
City Treasurer.

WILLIAM JOHNSTON,
City Solicitor.

The Board recommend the acceptance of the foregoing offer submitted by the State Life Insurance Company of Indianapolis subject to the condition that the insurance thereunder shall be placed upon any men enlisting as may be directed by the Board.

Respectfully submitted.

T. L. CHURCH (Mayor), *Chairman.*

BOARD ROOM, TORONTO, *April 6th, 1915.*

A communication from Mr. George B. Woodward, Third Vice President of the Metropolitan Life Insurance Company, was read, as follows:

METROPOLITAN LIFE INSURANCE CO.,
New York, May 1st, 1915.

To the Mayor and Council of the Corporation of the City of Toronto.

GENTLEMEN: In accordance with the agreement reached at the conference held yesterday at our office in this City with representatives of the City of Toronto, we submit the following:

It is understood that the Council of the City of Toronto, or the proper Board, will furnish to the Metropolitan on or before May 30th, 1915, a list of all Toronto members of the first Overseas Contingent, except as to the Reservists. The Metropolitan agrees to at once issue policies on the lives of all persons whose names are on this schedule, and where it has not already issued a policy to the City, the insurance to date and to be in effect from October 14th, 1914.

The City of Toronto is to at once pay to the Metropolitan the difference between the regular premium on the policies (plus extra premium of \$25 in each case), and the amount already paid as such premiums to the Company on account of the insurance of said Contingent, together with interest at 5 per cent per annum on the difference from October 14th, 1914, to date of payment. Payment of this difference may be made by the City in Toronto Bonds to net the Metropolitan not less than 5 per cent, subject to the approval by the Treasurer of the Metropolitan of the particular bonds offered.

The liability of the Metropolitan will be limited to policies issued on the lives of those whose names are certified on said list, and the Metropolitan is not to be called upon to pay on the life of any member of said First Contingent unless the name has been so certified.

The names of the Toronto Reservists are to be similarly certified to the Company, on or before June 30th, and they are to be insured subject to the same conditions as named above applying to the members of the First Contingent; and the Metropolitan is not to be called upon to pay any claim on the life of any Reservist unless the same has been so certified.

The Metropolitan agrees to issue not exceeding 3,700 policies of \$1,000 each on members of the Second Canadian Overseas Contingent, residents of Toronto, subject to the following conditions:

(1) Application for each policy so issued is to be made by the proper officer of the City of Toronto, the application to give all particulars necessary to enable the Company to issue a policy.

(2) In consideration of the agreement of the Metropolitan to insure this additional number of 3,700, the City of Toronto agrees to pay to the Metropolitan the second regular premium on all policies issued on the lives of members of the First Contingent but without the extra war premium, excluding any which may be cancelled on account of noncitizenship.

(3) On these new risks, to the number of 3,700, the City of Toronto is to pay one year's extra war premium of \$25 per \$1,000 in addition to the regular premium, and to pay the second regular premium on such policies, omitting the extra premium, provided the war does not cease in the meantime.

(4) If the war continues beyond the date when a third premium would fall due on the policies issued to either the First or Second Contingent, the City agrees to pay the regular premiums then due, omitting the extra war premium.

Payment of the regular and extra premium for the first year on these 3,700 risks may be made by the City in Toronto Bonds to net the Metropolitan not less than 5 per cent, subject to the approval by the Treasurer of the Metropolitan of the particular bonds offered.

In making this proposal we desire to call your attention to the fact that in issuing policies upon the lives of the persons whose names were sent us we found that a number of names sent us in your list were not actually citizens of Toronto, and therefore not covered by our agreement with you. If the City will send to us the names of all persons whom they know to be so situated, we will credit the City with the premiums received thereon, as we can not consider the policies valid. If in the meantime the Metropolitan has paid claims under any such policies, the City agrees to refund any amounts so collected.

It is understood, however, that if the Municipalities of which the persons so excluded are citizens will pay to the Metropolitan the amount of premium thereon, credited back to the City of Toronto by the Metropolitan, the Metropolitan will consider its policies in force on such persons until October 14th, 1915, and for such additional period as the regular premiums thereon shall be paid for; provided the names of all such persons are furnished to the Company on or before May 30th, 1915, together with the amount of premium due.

Should the Metropolitan pay a death claim under policy issued on the life of a member of either the First or the Second Contingent and it afterwards be found that such person was not dead, the City is to refund to the Metropolitan the amount paid.

Very truly, yours,

GEO. B. WOODWARD,
Third Vice President.

Controller Spence, seconded by Controller O'Neill, moves that the Council accepts and agrees to the proposals made in the Metropolitan Life Insurance Company's letter of May 1st, 1915, it being understood that the 3,700 further men to be insured by The Metropolitan Life Insurance Company, as set out in the sixth paragraph of the said letter, are to be any residents of Toronto enlisted for active service during the present war, other than the men of the First Contingent; and that the notice required by the 32d Rule of this Council be dispensed with so far as relates to this motion, which was carried.

APPENDIX V.

P. C. 667.

CERTIFIED COPY OF A REPORT OF THE COMMITTEE OF THE PRIVY COUNCIL, APPROVED BY HIS EXCELLENCY THE GOVERNOR GENERAL ON THE 15TH MARCH, 1917.

The Committee of the Privy Council have had before them a report, dated 3rd March, 1917, from the Minister of Finance, stating that he has received from the Superintendent of Insurance a memorandum with reference to the payment of war claims by life insurance companies in Canada in which it is stated that on account of the difficulty experienced by the said companies in obtaining satisfactory proof of the death of enlisted policyholders reported killed in action or missing and believed to be dead, the payment of the amounts due to the beneficiaries of such policyholders is being delayed; that in some cases the companies are reluctant to accept as conclusive evidence of death the official certificates of death, or presumption of death issued by the Department of Militia and Defence, and that such companies require in addition corroborative evidence from comrades or other persons who have seen the body after death; that as in many cases such additional evidence can not be produced it is probable that the payment of the claims of such policyholders will be deferred until after the conclusion of the war, and that the beneficiaries of such policyholders will be inconvenienced or injured by the said delay; that the Department of Militia and Defence has stated that the casualty records of all men whose deaths have been officially presumed have been carefully searched, and not a single instance has been found of any man having been found to be alive in respect of whom an official certificate of death has been issued, and that therefore the precautions being taken by the said companies appear to be unnecessary; that it is undesirable to modify by legislation or regulation the provisions of existing contracts even to the extent of prescribing the form of proof which the companies shall accept as satisfactory without some provision for compensation in the event of unwarranted payments being made; and that for these reasons it is desirable that a regulation should be made by the Governor in Council under the provisions of the War Measures Act, 1914, providing that all insurance companies transacting business of life insurance in Canada shall accept as satisfactory proof of death the official certificates of death or presumption of death as the case may be, issued by the Department of Militia and Defence, and shall, on the production of such certificate, pay to the beneficiary under any policy of life insurance on the life of an enlisted soldier resident in Canada at the time of the issue of the policy or at the time of enlistment, the amount

to which such beneficiary is entitled thereunder, and that in the event of such policyholder subsequently proving to be alive and the amount of the said payment not being refunded by the said beneficiary, there may be paid to such company out of the Consolidated Revenue Fund under the provisions of the War Appropriation Act, 1916, the amount by which the payment so made to the said beneficiary exceed the actuarial reserve maintained by the company in respect of the said policy at the date on which the said payment is made.

The Minister concurs in the report and recommendations of the Superintendent of Insurance and submits the same for favourable consideration.

The Committee advise that the foregoing be approved accordingly.

APPENDIX VI.

ADJUTANT GENERAL'S OFFICE,
MILITIA HEADQUARTERS,
OTTAWA, CANADA.

CERTIFICATE OF DEATH.

This is to certify that No. (rank, name, and battalion), Canadian Expeditionary Force, has been officially reported as having been killed in action on the day of, 191 .

On attestation, he gave the name and address of his next of kin as follows: (name and address).

.....,
Adjutant General.

MILITIA HEADQUARTERS,
OTTAWA,, 191 .

ADJUTANT GENERAL'S OFFICE,
MILITIA HEADQUARTERS,
OTTAWA, CANADA.

CERTIFICATE OF DEATH.

Certified that No. (rank, name, and battalion), Canadian Expeditionary Force, has been officially reported missing since the day of, 191 , and that after full enquiry made, no information has come to hand which would indicate that he is not dead. It has, therefore, been presumed for official purposes that he died on or since that date.

On attestation, he gave the name and address of his next of kin as follows: (name and address).

.....,
Adjutant General.

MILITIA HEADQUARTERS,
OTTAWA,, 191 .

APPENDIX VII.

Reference No.
..... of, in the County of
of the late, hereinafter called the "insured," of the City of
Toronto, Canada, do hereby acknowledge to have received from the Corporation of
the City of Toronto the sum of Dollars, being in account of proceeds of an
insurance to the amount of \$1,000 on the life of the said "insured," and hereby admit
that this amount is received by on the supposition that the said "insured"
lost his life on active service, and also was a bona fide resident of the said City of
Toronto for at least years before his enlistment for active service; and
hereby undertake and agree that in the event of the said "insured" being still alive,
or on it being shown that he was not a resident as aforesaid, the amount now paid
to and all other payments made on account thereof will be returned forthwith
upon demand to the said Corporation of the City of Toronto.

Dated at, in the County of, this day of, A. D. 191 .
Signed in the presence of—

.....
Name.	
.....
Street.	
.....	
Place.	

APPENDIX VIII.

THE HOUSE OF COMMONS OF CANADA.

BILL 7

As Passed by the House of Commons August 22, 1914.

AN ACT TO INCORPORATE THE CANADIAN PATRIOTIC FUND.

Whereas it is desirable to provide a fund for the assistance, in case of need, of the wives, children, and dependent relatives of officers and men, residents of Canada, who, during the present war, may be on active service with the naval and military forces of the British Empire and Great Britain's allies; and whereas money is now being raised for the said purpose, and it is desirable to provide for the administration of the same: Therefore His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:

1. This Act may be cited as The Canadian Patriotic Fund Act, 1914.
2. His Royal Highness The Governor General, His Honour Sir J. M. Gibson, K. C. M. G., Lieutenant Governor of Ontario, His Honour Sir Francois Langelier, K. C. M. G., Lieutenant Governor of Quebec, His Honour Josiah Wood, Lieutenant Governor of New Brunswick, His Honour D. C. Cameron, Lieutenant Governor of Manitoba, His Honour Thomas W. Paterson, Lieutenant Governor of British Columbia, His Honour James D. McGregor, Lieutenant Governor of Nova Scotia, His Honour B. Rogers, Lieutenant Governor of Prince Edward Island, His Honour Geo. E. Brown, Lieutenant Governor of Saskatchewan, His Honour G. H. V. Bulyea, Lieutenant Governor of Alberta, The Right Honourable Sir Robert Borden, P. C., G. C. M. G., The Honourable Sir George E. Foster, K. C. M. G., The Honourable George H. Perley, The Honourable Robert Rogers, The Honourable W. T. White, The Honourable L. P. Pelletier, The Honourable J. D. Hazen, Colonel The Honourable Sam Hughes, The Right Honourable Sir Wilfrid Laurier, P. C., G. C. M. G., The Honourable Sir James Whitney, K. C. M. G., The Honourable Sir Lomer Gouin, K. C. M. G., The Honourable J. K. Flemming, The Honourable G. H. Murray, The Honourable J. A. Matheson, The Honourable Walter Scott, The Honourable A. L. Sifton, The Honourable Sir R. P. Roblin, K. C. M. G., The Honourable Sir Richard McBride, K. C. M. G., The Honourable George Black, Sir Hugh Graham, The Honourable T. Berthiaume, E. R. Woods, Esq., The Honourable Sir William Mulock, K. C. M. G., J. K. L. Ross, Esq., The Honourable Robert Jaffray, Sir Thomas Shaughnessy, K. C. V. O., Sir William Mackenzie, E. J. Chamberlin, Esq., The Right Honourable Chief Justice Sir Charles Fitzpatrick,

G. C. M. G., The Honourable C. Sifton, H. B. Ames, Esq., M. P., F. S. Barnard, Esq., George Burn, Esq., T. C. Casgrain, Esq., K. C., The Honourable R. Dandurand, Sir Henry K. Egan, J. B. Fraser, Esq., Herbert S. Holt, Esq., The Honourable Sir Melvin Jones, The Honourable A. E. Kemp, The Honourable W. L. McKenzie King, The Honourable R. Lemieux, A. M. Nanton, Esq., William Price, Esq., A. F. Sladen, Esq., C. M. G., Sir Byron Edmund Walker, C. V. O., E. C. Whitney, Esq., and Lieutenant Colonel D. R. Wilkie are incorporated under the name of "The Canadian Patriotic Fund" (hereinafter called the "Corporation").

OBJECTS.

3. The objects of the Corporation shall be to collect, administer, and distribute the fund hereinbefore mentioned for the assistance in case of need of the wives, children, and dependent relatives of officers and men, residents of Canada, who, during the present War, may be on active service with the naval and military forces of the British Empire and Great Britain's allies.

PROPERTY VESTED IN CORPORATION.

4. There shall vest in the Corporation (a) any moneys, securities, and other property which are now the property of The Canadian Patriotic Fund Association, incorporated by Chapter 92 of the Statutes of 1901, and which the Association may agree to transfer;

(b) All moneys at any time contributed to be expended or distributed by or through the Corporation hereby created.

LIABILITIES ASSUMED.

5. Upon the transfer of the funds, securities, and other property of the Canadian Patriotic Fund Association to the Corporation, The Corporation shall be subject to the obligations, debts, and liabilities of the said Association up to the amount so received.

EXECUTIVE COMMITTEE.

6. The affairs of the Corporation shall be administered by an executive committee, consisting of a president and such other officers and members as the Corporation may from time to time determine.

PROVISIONAL EXECUTIVE COMMITTEE.

7. The persons whose names are mentioned in Section 2 shall constitute the provisional executive committee, and provided that ten of the said persons are present at the meeting, the Corporation may be organized and the executive committee may be selected by them. Until otherwise provided by the by-law or regulation made by the executive committee, ten members of the executive committee shall be a quorum.

DISTRIBUTION OF FUNDS.

8. The Corporation shall, subject to the provisions of this Act, pay, apply, or distribute to the best of its judgment, in such manner among the persons entitled to share therein, and in such amounts, as

in the absolute and uncontrolled discretion of the Corporation seems proper or advisable; and the Corporation shall take such means as it thinks necessary or advisable to ascertain who are entitled to share in the said fund, and to what extent and in what manner the persons entitled will be relieved by the Corporation.

BRANCHES.

9. The Corporation shall have the power to establish branches or local organizations throughout Canada, and to cooperate with any association or organization established in any place in Canada for purposes similar to those of the Corporation, upon such terms and conditions as the Corporation may by by-law determine.

INVESTMENTS.

10. Pending the final distribution of the fund, the Corporation may, (a) invest it in the public consols, stocks, bonds, debentures, or other securities of the United Kingdom, or of any Dominion or dependency thereof, or in the debentures, bonds, stocks, or other public securities of Canada, or of any province of Canada, or of any municipal or public school corporation in Canada; or, (b) deposit it with any chartered bank in Canada.

AUDIT.

11. On and from the thirty-first day of December, one thousand nine hundred and fourteen, the accounts of the Corporation shall be audited by the Auditor General of Canada, and a report of such audit, with such further statement as seems proper, shall be published as the Corporation directs; and the said auditor, or his successor in office, shall be the auditor of the Corporation.

LIABILITY OF CORPORATION FOR ITS OFFICERS.

12. Except as provided for by the next preceding section, and except as to any fraudulent act or fraudulent omission of the Corporation, the Corporation shall not, nor shall any of its members, be liable or in any way answerable for any of the acts, errors, or omission of the Corporation or of any of its officers, members, employees, or agents, with respect to the receipt, expenditure, or distribution of the said moneys, or of any portion thereof, or in any other respect in carrying out the objects of this Act.

EX OFFICIO MEMBERS.

13. Until the Corporation is dissolved, as hereinafter provided, the successor or successors in office of the Governor General, and of the Lieutenant Governors of Ontario, Quebec, Nova Scotia, New Brunswick, Manitoba, British Columbia, Prince Edward Island, Saskatchewan, and Alberta, and the Commissioner of the Yukon, shall be members of the Corporation.

HEAD OFFICE.

14. The office of the Corporation shall be in the City of Ottawa.

BY-LAWS AND REGULATIONS.

15. Subject to the provisions of this Act, the Corporation may make by-laws, rules, and regulations as to the holding of its meetings, the admission of additional members to the Corporation, the appointment and duties of its officers and employees, the appointment of members to fill vacancies, the quorum at meetings, and generally the internal government of the Corporation and the carrying out of the objects of this Act.

PAYMENT OF EXPENSES.

16. The Corporation may, out of the moneys vested in it, pay all expenses it thinks necessary or proper to incur, or which it considers have been properly incurred by the said Corporation or on its behalf, in connection with the carrying out of the objects of this Act or of the work of the said Corporation or of the Committees thereof.

DISSOLUTION OF CORPORATION.

17. When the purposes for which the Corporation is created have been fully carried out, completed, and finished, the corporate powers of the Corporation shall be deemed to have ceased and the Corporation to be dissolved.

 THE HOUSE OF COMMONS OF CANADA.

BILL 39

As Passed by the House of Commons, 24th February, 1915.

AN ACT TO AMEND THE CANADIAN PATRIOTIC FUND ACT, 1914.

1914, 2nd Sess., c. 8.

His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:

1. Section 3 of The Canadian Patriotic Fund Act, 1914, Statutes of 1914 (Second Session), Chapter 8, is amended by adding thereto the following subsections:

NEWFOUNDLANDERS IN CANADIAN FORCES.

"2. The Corporation may also assist, in case of need, residents of Newfoundland who are the wives, children, and dependent relatives of officers and men, residents of Newfoundland who, during the present War, may be on active service in the Canadian naval or military forces."

OBJECTS OF CORPORATION EXTENDED TO:

'3. The Corporation may also, during the War and for six months after the termination of the War, assist in case of need:

INCAPACITATED OFFICERS AND MEN.

(a) Officers and men, residents of Canada, who return to Canada incapacitated by wounds, injuries, or disease received or contracted while on active service with the naval or military forces of the British Empire and Great Britain's allies during the present War; and

WIDOWS, ETC., OF OFFICERS AND MEN.

(b) Residents of Canada who are widows, children, and dependent relatives of officers or men, residents of Canada, who die from wounds, injuries, or disease received or contracted while on such active service.

LIMIT OF ASSISTANCE THAT CAN BE GIVEN.

No assistance shall be given to any person under the provisions of this subsection for a longer period than six months, or to any person who is in receipt of any gratuity, pension, or allowance paid by His Majesty or by any foreign government in consequence of incapacity or death occurring as aforesaid."

APPENDIX IX.

No. 165.

1916.

BILL.

AN ACT TO AMEND AN ACT TO AUTHORIZE AND CONFIRM GRANTS BY MUNICIPAL CORPORATIONS FOR PATRIOTIC PURPOSES.

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

5 Geo. V, c. 37,
s. 1, amended.

1. (1) Section 1 of The Act to authorize and confirm grants by Municipal Corporations for Patriotic Purposes is amended by inserting the following clauses:

Buildings for
barrack accom-
modation.

(i) Provide, furnish, equip and maintain, improve and alter buildings (other than armouries or drill sheds) to be used as quarters or barrack accommodation for officers and men, members of the Canadian Expeditionary Force, while in training in the municipality for active service during the present war with the naval or military forces of the British Empire and Great Britain's allies;

Recruits.

(j) Assist in obtaining recruits for the said Canadian Expeditionary Force;

Band instru-
ments.

(k) Purchase musical instruments and musical equipment for any band of a battalion forming part of the said Canadian Expeditionary Force;

Machine guns.

(l) Provide machine guns for the said Canadian Expeditionary Force;

(m) Any fund established by by-law of any municipal corporation to grant aid to the wives, children, and dependent relatives of officers and men residents of the municipality who, during the present war, shall die whilst on active service with the naval and military forces of the British Empire and Great Britain's allies, such fund to be subject to such conditions and provisos as may be contained in the by-law establishing the same.

Grants con-
firmed.

(2) Any grants heretofore made for any of the purposes mentioned in subsection 1 are confirmed and declared to be legal, valid, and binding.

5 Geo. V., c. 37,
amended.

2. The said Act is amended by adding thereto the following as section 1a:

Rateable prop-
erty, what to in-
clude.

1a. (1) In this Act "rateable property" shall include assessment for real property, income and business or other assessment made under The Assessment Act, and the amount raised under the authority of this Act shall be raised, levied, and collected upon all the rateable property in the municipality by a general rate and except as to the exemptions from taxation set out in section 5 of The Assessment Act, no partial or total exemption from assessment or taxation, and no fixed assessment or other special provision or agreement shall apply to the assessment and collection of such rate, anything in any general or special Act, or in any municipal by-law or resolution, or in any contract, or other instrument, or in any Order of The Ontario Railway and Municipal Board, or otherwise, to the contrary notwithstanding.

Deduction of
debt in ascertain-
ing limit of bor-
rowing powers.

(2) In calculating the amount of the indebtedness of the municipality for the purpose of ascertaining if the limit of its borrowing power, as fixed by any general or special Act, has been reached any debentures issued under the authority of this Act shall not be reckoned as part of such indebtedness, but shall be excluded in computing the same.

Limit fixed by
Rev. Stat. c. 192,
s. 297 not to ap-
ply.

(3) In calculating whether or not the limit fixed by section 297 of The Municipal Act has been reached, any rates levied under the authority of this Act shall be excluded in computing the same.

Issue of twenty-
year debentures
authorized.

3. (1) Section 2 of the said Act is amended by striking out the word "ten" in the third line and substituting therefor the word "twenty."

APPENDIX X.

No. 59.

1917.

BILL.

AN ACT TO AMEND AN ACT TO AUTHORIZE AND CONFIRM GRANTS BY MUNICIPAL CORPORATIONS FOR PATRIOTIC PURPOSES.

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. Clause (e) of section 1 of The Act to authorize and confirm grants by Municipal Corporations for Patriotic Purposes is amended by inserting after the word "equipment" in the first line the words "for any battalion the members of which are enlisted for overseas service during the present war or." 5 Geo. V, c. 37, s. 1, amended.

2. Clause (f) of section 1 of The Act to Authorize and Confirm Grants by Municipal Corporations for Patriotic Purposes is amended by striking out the word "dependents" in the first line thereof and by substituting the following words therefor: "parents, widows, children, sisters, or brothers, or any person acting in loco parentis." 5 Geo. V, c. 37, s. 1, amended.

3. Section 1 of the said Act is amended by adding the following clause after clause (b): 5 Geo. V, c. 37, s. 1, amended.

(bb) The British Red Cross Fund and The British Sailors' Relief Fund.

4. Clause (m) of section 1 of the said Act as enacted by section 1 of the Act passed in the 6th year of the reign of his present Majesty, chaptered 40, is repealed and the following substituted therefor: 5 Geo. V, c. 37, s. 1, amended.

(m) "Any fund established for providing allowances to widows, children, widowed mothers, parents, persons acting in loco parentis, or dependents of officers and men, who were residents of the municipality six months prior to enlistment, and who have died or may die while on active service with the naval or military forces of The British Empire and Great Britain's Allies, or while returning home thereafter." Fund for aiding widows, children, parents, dependents, etc.

5. Section 1 of the said Act is amended by adding thereto the following clause: 5 Geo. V, c. 37, s. 1, amended.

(n) Provide for grants to officers and men who have returned from active service with the naval or military forces of the British Empire or Great Britain's Allies and who were residents of the municipality for six months prior to enlistment. Grants to returned officers and men.

6. Section 1 of the said Act is further amended by inserting the following as subsection 2: 5 Geo. V, c. 37, s. 1, amended.

(2) Any municipal corporation may expend moneys for the following purposes: Expenditures for certain purposes.

(a) For the purchase of rifles, ammunition, and horses;

(b) For the protection of any municipal property;

(c) For pay to soldiers for picket duty and for expenses incurred in connection with returned soldiers;

(d) For any other expenditures incurred by the municipality in carrying out the provisions of this Act and amendments thereto.

7. Moneys appropriated by the council of any municipality under clauses (f) and (g) of section 1 of the said Act shall not be liable to attachment. When moneys not liable to attachment.

8. This Act shall be deemed to have been in force since the 4th day of August, 1914, and any grants heretofore made for any of the foregoing purposes are confirmed and declared to be legal, valid, and binding. Act retroactive and grants confirmed.

9. The by-laws set out as Schedule "A" hereto are hereby confirmed and declared to be legal, valid, and binding. By-laws confirmed.

SCHEDULE "A."

BY-LAW NUMBER 653 OF THE COUNTY OF WENTWORTH. A BY-LAW RE INSURANCE ON THE LIVES OF COUNTY MEN OF THE COUNTY OF WENTWORTH.

Whereas it is considered desirable to effect insurance on the lives of all men residents of the County, other than the City of Hamilton, who enlist in Wentworth regiments of the active militia of Canada for service in Europe:

Be and it is hereby enacted:

1. That the insurance in effect on the lives of the men residents of the County, other than the City of Hamilton, who have enlisted in Wentworth regiments of the active militia of Canada for service in Europe, under policies of insurance with the Aetna Life Insurance Company and policies of insurance with the Sun Life Insurance Company, be and the same is hereby confirmed.

2. That the warden and treasurer are hereby authorized to effect insurance with the Aetna Life Insurance Company and the Sun Life Assurance Company on the lives of:

A. (1) Each recruit who, since the 4th day of August, 1914, has enlisted.

(2) On each recruit who may in the future enlist in the Wentworth regiments of the active militia of Canada for service in Europe.

B. On each man who is already enrolled in the Wentworth regiments, and who may volunteer for service in Europe, as follows:

(1) On the life of an unmarried man, the sum of \$500, the policy being payable to his mother, if alive, and in the event of his mother not being alive, to his estate.

(2) On the life of a married man without children, the sum of \$1,000, the policy being payable to his wife.

(3) On the life of a married man with children, the sum of \$1,250, the policy being payable to his wife and children.

3. That the warden and treasurer are authorized to pay all future premiums payable under each of said policies as they mature, until the insured is discharged from further military duty, or from three months after the termination of the present war.

Dated this 10th day of August, 1915.

Passed in Council this 10th day of August, A. D. 1915.

BY-LAW NUMBER 666 OF THE COUNTY OF WENTWORTH. RESPECTING THE WENTWORTH SOLDIERS' BENEFIT FUND COMMITTEE.

The Council of the Corporation of the County of Wentworth enacts as follows:

1. That Council of the Corporation of the County of Wentworth hereby creates and establishes a committee to be designated "The County of Wentworth Soldiers' Benefit Fund Committee," hereafter called the "Committee."

2. The objects and purposes of this committee shall be as follows:

(a) To insure or keep insured (should the committee deem it advisable) the lives, for the benefit of dependents, of officers and men, bona fide residents of the municipality for three months prior to the date of his enlistment, who during the present war may be on active service with the naval or military forces of the British Empire and Great Britain's allies.

(b) To control, manage, and deal with the insurance that may hereafter be effected upon the lives of the said soldiers in such manner as the committee deem advisable, or to cancel any such insurance, and subject to the provisions hereinafter set forth to pay out of the amounts to be received from such insurance.

3. The committee shall consist of J. H. Dickenson, J. F. Vance, John Douglas, J. E. Peart, and Archibald Cochrane, until the first meeting of the Council in the year 1917. At the first meeting of the Council in each year a committee shall be appointed to act under this by-law for the current year.

4. A majority of the committee shall constitute a quorum for the transaction of business, and the decision of a majority of those present at any meeting shall be final.

5. The officers of the committee shall consist of a chairman, vice chairman, secretary, and treasurer.

6. The treasurer of the county corporation shall be treasurer of the committee, and the other officers shall be appointed by the committee.

7. The committee shall not incur any debt beyond the amount of funds on hand and such further amounts as may be authorized by the Council.

8. All funds of the committee shall be under the control of the committee and shall be paid out in manner following:

(a) Subject to the provisions hereinafter contained, all sums paid to dependents of married men shall be paid in monthly instalments of \$20.00 each, and all sums paid to dependents of unmarried men shall be paid in monthly instalments of \$15.00 each.

(b) Any such sums as may be necessary to pay insurance premiums on the lives of officers and men insured under the provisions of this by-law.

9. Unless the committee otherwise directs, the payments of such monthly instalments shall commence at the expiration of thirty days from the date that the committee is furnished with satisfactory evidence of the death of any of such officers or men, and if required by committee, other proofs of claim.

10. In no case shall the total amount paid to dependents of married men exceed the sum of \$1,000, and in no case shall the total amount paid to dependents of unmarried men exceed the sum of \$500.

11. The committee shall have the power to pay a lump sum not exceeding the above-mentioned amounts in lieu of payment by instalment and may vary the amount of such instalment. The County Council may vary the provisions and conditions herein contained and make such further provisions and conditions respecting the said fund and committee as the council deem expedient.

12. The committee shall keep proper records of all moneys received and paid out and shall, whenever requested so to do by the County Council, make report upon all such moneys received and paid out.

13. In the event of the committee not being able to effect insurance on the lives of officers and men with any satisfactory insurance company, except on the payment of premiums which the committee consider excessive, then the county will itself carry the insurance on the lives of the officers and men, and from time to time pay out of the general fund of the county to the committee such sums of money as an equivalent to what would have been paid by an insurance company or companies on the death of any officer or man.

14. The county council shall from time to time, upon the request of the committee, authorize to be paid out of the general funds of the county, or otherwise, to the committee such sums of money as shall be necessary to pay the premiums on the insurance effected with insurance companies on the lives of officers and men.

15. On the event of there being a balance after the work of the committee has been completed, or in the event of the committee ceasing to act or being abolished, any balance of the fund shall revert to the county corporation.

16. That the sum of \$6,000.00 and interest, part of the sum of money authorized to be raised under the provisions of By-Law Number 660, be paid over to the committee to be dealt with by them under the provisions of this by-law.

Passed this 25th day of July, 1916.

J. H. DICKENSON, *Warden.*
J. W. JARDINE, *Clerk.*

BY-LAW NUMBER 672 OF THE COUNTY OF WENTWORTH. BY-LAW TO AMEND BY-LAW NUMBER 666.

The Council of the Corporation of the County of Wentworth enacts as follows:

1. That section No. 2 of said by-law be amended by adding thereto the following paragraph (c):

(c) To grant aid to wives, children, and dependent relatives of officers and men, bona fide residents of the municipality for three months prior to his or their enlistment, who during the present war shall die whilst on active service with the naval or military forces of the British Empire and Great Britain's Allies.

(2) That section No. 8, subsection (a) of said by-law, be amended by adding after the words "sums paid" in the second and third lines, the words "under the provisions" of section 2, subsections (a) and (b).

(3) That said section No. 8 be further amended by adding thereto the following paragraph:

(c) Subject to the provisions hereinafter contained, all sums paid the wives, children, and dependent relatives of married men, under the provisions of section 2, subsection (c), shall be paid in monthly instalments of \$20 each, and all sums paid the dependent relatives of unmarried men, under the provisions of section 2, subsection (c), shall be paid in monthly instalments of \$15 each.

(4) That section No. 10 of said by-law be struck out, and the following section be substituted therefor:

10. In no case shall the total amount paid to wives, children, and dependent relatives or dependents of married men, as above provided, exceed the sum of \$1,000, and in no case shall the total sum paid the dependent relatives or dependents as above provided of unmarried men exceed the sum of \$500.

5. That section No. 14 of said by-law be amended by striking out all after the word "necessary" in the fourth line and by substituting therefor the words "for the objects and purposes set out in paragraph two hereof as amended."

Passed this 15th day of November, 1916.

J. H. DICKENSON, *Warden.*
J. W. JARDINE, *Clerk.*

APPENDIX XI.

SCHEDULE OF ASSISTANCE.

Eastern City Maximum—not to be exceeded, and where living is less expensive than in Montreal, Toronto, and other large cities, the scale should be somewhat lower.

1. Wife, having no children (in receipt of \$20 per month as separation allowance and \$15 or more per month as assigned pay), may, if in need, receive from the Canadian Patriotic Fund \$5 or less.	
2. Wife and one child:	Per month.
(a) If the child is under 15 and over 10 years of age.....	\$17. 50
(b) If the child is under 10 and over 5 years of age.....	14. 50
(c) If the child is under 5 years of age.....	13. 00
3. Wife and two children:	
(a) If both children are between ages of 10 and 15 or if one between 10 and 15 and the other between 5 and 10.....	22. 00
(b) If both between 5 and 10.....	17. 50
(c) If one is between 5 and 10 and the other 5 years old or less.....	17. 50
(d) If both are under 5 years of age.....	16. 00
4. Wife and three children:	
(a) If all three are between the ages of 10 and 15, or if two are between 10 and 15 and the third under 10, or if one is between 10 and 15, two between 5 and 10.....	25. 00
(b) If all three are between the ages of 5 and 10, or if two are between the ages of 5 and 10 and the third younger, or if one is between the age of 5 and 10 and two are younger.....	20. 50
(c) If all three are under 5 years of age.....	19. 00
5. Wife and four children:	
(a) If the family includes one child between 10 and 15, and a second child between 5 and 15, no matter what be the ages of the other two.....	28. 00
(b) If including one child between 5 and 10, and the other children being of this category or younger.....	23. 50
(c) If all four are under 5 years of age.....	22. 00
6. Woman with five children:	
(a) If the family contains one between 10 and 15 and a second child between 5 and 15, no matter what be the age of the other children, the maximum allowance may be given, which is.....	30. 00
(b) If the family include one or more children between 5 and 10 and others younger.....	26. 50
(c) If all the children are under 5 years of age.....	25. 00
7. Woman with six children:	
(a) If the family contains one child between 10 and 15 and a second child between 5 and 15, no matter what be the age of the others, the maximum allowance may be given, which is.....	30. 00
(b) If the family contains one or several children between 5 and 10 and others younger.....	29. 50
(c) If all the children are under 5 years of age.....	28. 00
8. Woman with seven or more children, no matter what be their ages, may be given the maximum allowance of.....	30. 00

The above applies to wives of men who have joined the Canadian Expeditionary Force, where they are in receipt of separation allowance from the Government.

It does not apply, in this form, to the families of British reservists, nor to French, Belgian, or Italian families, whose separation allowance differs from that allowed by the Canadian Government.

Widowed mother:

If she depended entirely for support on an unmarried son who has joined the Canadian Expeditionary Force, she may, if in need, receive from the Canadian Patriotic Fund a monthly allowance not to exceed..... \$10. 00

Parents:

If the parents of a soldier in the Canadian Expeditionary Force are both old and incapable of work and if they were entirely dependent on the soldier they may, if in need, receive from the Canadian Patriotic Fund a monthly allowance not to exceed..... 20. 00

[illegible]

Members of the forces who have been disabled to a less degree than 10 per cent or who have incurred an impairment of a permanent character may be awarded a gratuity of either.....or.....as the Commission may decide. Any member awarded.....may if he so desires commute his right to such gratuity for a pension of..... per annum.

APPENDIX XIII.

SUGGESTED DISABILITY TABLE FOR THE USE OF MEDICAL OFFICERS OF CANADIAN EXPEDITIONARY FORCE.

Head:	Per cent.
Epilepsy, fits occurring several times per day	100
Epilepsy, fits occurring every two or three weeks	50
Insanity, total	100
Insanity, partial (mental detriment or other appropriate phrase)	80
Loss of portion of cranium	20-30
Loss of both eyes	100
Loss of one eye	33
Loss of nose	20-30
Total loss of hearing	50
Deafness of one ear	15
Loss of tongue	60
Total paralysis of facial nerve	20
Almost total loss of teeth	20
Upper extremities:	
Loss of middle or ring or little finger	10
Loss of index finger	15
Loss of thumb (with metacarpal bone)	30
Loss of all fingers except one, on both hands	100
Ankylosis of the wrist, in good position	20
Ankylosis of the wrist, in bad position	40
Loss of one hand	70
Loss of both hands	100
Ankylosis of an elbow, in good position	30
Ankylosis of an elbow, in bad position	60
False joint at an elbow	50
Loss of one arm, below elbow	70
Loss of one arm, above elbow	75
Loss of both arms	100
Disarticulation at the shoulder	80
Ankylosis of the shoulder joint	50
False joint at a shoulder	50
Lower extremities:	
Loss of any toe other than big toe	5
Loss of big toe	10
Ankylosis of big toe, in good position	10
Ankylosis of big toe, in bad position	20
Loss of one foot	60
Loss of both feet	100
Ankylosis of ankle, in good position	20
Ankylosis of ankle, in bad position	50
Loss of leg	60
Loss of thigh at upper third	70
Ankylosis of knee joint, in good position	30
Ankylosis of knee, in bad position	60
Fracture of thigh with slight (1 inch) shortening	10
Disarticulation at the hip joint	80
Miscellaneous:	
Loss of any two limbs	100
Ventral hernia	15
Inguinal hernia	10-30
Tuberculosis, in early stages	50
Tuberculosis, incurable	100
Chronic bronchitis	30
Chronic cystitis	70

APPENDIX XIV.

PENSIONS.

Pensions for the Canadian Expeditionary Force are dealt with by the Board of Pension Commissioners for Canada, under the following regulations:

SCHEDULE PENSION REGULATIONS.

1. There shall be a commission to be known as the Board of Pension Commissioners for Canada, consisting of three members appointed by the Governor in Council (hereinafter called the Commission). Each commissioner shall hold office during good behavior for a period of ten years from the date of his appointment, but may be removed at any time by the Governor in Council for cause, and a commissioner, on the expiration of his term of office, shall be eligible for reappointment. The Commissioners may, from time to time, elect one of their number to be chairman of the commission.

2. Subject to the regulations hereinafter set out, the commission shall have exclusive jurisdiction and authority to consider and make all grants and payments of military and naval pensions, and of gratuities, allowances, and assistance to persons wounded, injured, or incapacitated in the military or naval service of Canada (hereinafter called members of the forces), or to their dependent relatives, and shall have exclusive jurisdiction and authority to deal with all matters pertaining to such pensions, gratuities, allowances, and assistances.

3. The Commission shall have authority to engage such clerical and other assistance as they may consider requisite for the transaction of their duties, and at such salaries as may be approved by the Governor in Council.

4. In the administration of their powers by the commission great care shall be taken to insure all applications being considered and determined with the utmost despatch.

5. There shall be no appeals from the decisions of the commission, but every applicant for a pension, gratuity, allowance, or assistance may present his or her case either personally or by counsel before the full Commission sitting for the purpose of hearing the complaints of those who may have been dissatisfied with decisions given in the ordinary course of administration.

6. The pension or other grant awarded any member of the forces, or any dependent of such member, shall not be assigned, charged, attached, or anticipated or commuted, nor shall any assignment, charge, attachment, anticipation, or commutation be recognized in any way by the Commission or any officer or servant of the Crown.

7. All pensions awarded to members of the forces shall be determined by the disability of the applicant without reference to his occupation prior to enlistment.

8. Each case shall be subject to review at the end of a year from the time when the pension is first granted, except in those cases where the disability is obviously permanent, and then there shall be no further review.

9. No deduction shall be made from the amount awarded to any pensioner owing to his having undertaken work or perfected himself in some form of industry.

10. The Commission shall make provision for the vocational training of those who are desirous of taking advantage of it, and for the supplying, from time to time, of artificial limbs and appliances to those who would thereby be benefited.

11. The Commission shall have power to entrust to a reputable person for administration the pension or other grant to any pensioner or beneficiary when the Commission is satisfied that it is being improvidently expended by the pensioner or beneficiary, and the expense of such administration, if any, shall be borne by the Crown.

12. The following shall be the scale of pensions for total disability:

	Yearly.
Rank and File.....	\$480
Squad, Battery, or Company Sgt. Major.....	510
Squad, Battery, or Company Q. M. Sgt.....	510
Colour Sergeant.....	510
Sergeant.....	510
Staff Sergeant.....	510
Regimental Sgt. Mjr. Not W. O.....	620
Master Gunner not W. O.....	620
Regimental Q. M. Sgt.....	620
Warrant Officer.....	680
Lieutenant.....	720
Captain.....	1,000
Major.....	1,280
Lieut. Colonel.....	1,560
Colonel.....	1,890
Brigadier General.....	2,700

13. Those who are entitled to be awarded pensions shall be divided into six classes, and each member of each class shall be awarded a pension in direct proportion to the partial or total disability, as follows:

Class 1. Total disability, 100 per cent. For example:

- Loss of both eyes.
- Loss of both hands, or all fingers and thumbs.
- Incurable Tuberculosis.
- Loss of both legs at or above knee joint.
- Insanity.
- Permanent extreme leakage of valves of heart.

Class 2. Disability 80 per cent and less than 100 per cent, pension 80 per cent of

Class 1. For example:

- Loss of one hand and one foot.
- Loss of both feet.
- Disarticulation of leg at hip.

Class 3. Disability 60 per cent and less than 80 per cent, pension 60 per cent of Class 1.

For example:

- Loss of one hand.
- Loss of leg at or above knee.
- Loss of tongue.
- Loss of nose.

Class 4. Disability 40 per cent and less than 60 per cent, pension 40 per cent of Class 1.

For example:

Loss of one eye.

Loss of one foot.

Total deafness.

Loss of two thumbs.

Class 5. Disability 20 per cent and less than 40 per cent, pension 20 per cent of Class 1.

For example:

Loss of one thumb.

Anchylosis of elbow, knee, shoulder, wrist, or ankle.

Class 6. Disability under 20 per cent, a gratuity not exceeding \$100. For example:

Total deafness in one ear.

Partial deafness in both.

Loss of index or other finger.

14. To those up to and including the rank of lieutenant, who are disabled totally, and in addition are totally helpless so far as attendance to their physical wants is concerned, a further allowance may be made of an amount not exceeding \$250 a year, but such special allowances shall be subject to annual review.

15. Those up to and including the rank of lieutenant, who are disabled and are entitled to a pension in the 1st, 2nd, or 3rd class shall be paid, in addition to the personal pension a special allowance of \$6 a month for each child; of the rank of captain, \$7 a month for each child; of the rank of major, \$8 a month for each child; of the rank of lieutenant colonel, colonel, or brigadier general, \$10 a month for each child. Child shall include a stepchild and also a child in respect of whom the pensioner was loco parentis, but in either case only if the relation had been established before the pensioner's disability arose.

16. If a member of the forces has been killed, or has died as the result of injuries received, or disease contracted or aggravated while on active service, the widow, until remarriage, shall be entitled to the equivalent of the pension in Class 2, and also be entitled to draw the allowance for children. On the remarriage of the widow her pension shall cease, but she shall be entitled then to the gratuity of an amount equivalent to one year's pension.

17. If a member of the forces who has been killed, or had died as a result of injuries received, or disease contracted or aggravated while on active service was a widower, but leaves a child or children as defined in Regulation 15, said child or children shall receive an allowance of \$12 per month each.

18. In the event of an application being made for a pension on behalf of a woman who has, without being married to a member of the forces, lived with him as his wife, or on behalf of the child or children of any such man or woman, the Commission shall be authorized to grant the customary pension and allowances for a wife or for a child or children, on being satisfied that the circumstances were such as to warrant the conclusion that the woman had, at the time of enlistment and for a reasonable time previously thereto, publicly been represented as the wife of said member, or if the Commission is satisfied that justice would be done by the recognition of such woman, for the purpose of a pension, as the wife of such member. On the marriage of the woman her pension shall cease, but she shall be entitled to a gratuity of an amount equivalent to one year's pension.

19. No allowance shall be paid to or in respect of any child if a boy over the age of sixteen, or a girl over the age of seventeen, unless owing to mental or physical infirmity the child is incapable of earning a livelihood, in which case the allowance may, if in the discretion of the Commission it seems best, be continued until the child is twenty-one. No allowance shall be paid in respect of a child after the marriage of such child.

20. No pension or allowance shall be paid to a member of the forces or any person dependent upon him when the disability or death in respect of which the claim is made was occasioned by the negligence of such member, unless the Commission otherwise consent.

21. In all cases the claims by members of the forces for pensions must be made within two years of the date of the appearance of the disability in respect of which the claim is made.

22. A widowed mother, stepmother, or grandmother wholly or mainly dependent upon a member of the forces who is killed or dies as the result of injuries received or disease contracted or aggravated while on active service, if such member was without dependent children and unmarried, or a widower, shall be entitled to a pension of Class 3; provided, however, that no such woman shall be entitled to more than one pension. On the marriage of the woman such pension shall cease, but she shall be entitled then to a gratuity of an amount equivalent to one year's pension.

23. A father, wholly or mainly dependent upon the son who is a member of the forces and who is killed or dies as a result of injuries received or disease contracted or aggravated while on active service, if such member was without dependent children and unmarried, or a widower, shall be entitled to a pension of Class 3.

24. If a member of the forces to whom a pension has been granted in either Class 1 or Class 2 dies, leaving a wife to whom he was married at the time of his incurring the disability in respect of which his pension was granted, or a woman occupying at said time the position of a wife within the purview of Regulation 18, or leaving children by such wife or woman, the pension for the Class next below that granted the said member shall be given said wife or woman and the allowance on behalf of any child or children shall be continued subject to the restrictions as to age as provided by Regulation 19. On the marriage of the wife or woman her pension shall cease, but she shall be entitled to a gratuity equivalent to one year's pension.

25. Pensions to widows and allowances to children shall take effect from the day following that on which the death of the member of the forces in respect of whom said pension is granted occurred, and a gratuity equivalent to two months' pension or two months' allowance shall be paid the first month in addition to the pension.

26. Subject to the approval of the Governor in Council the Commission may make such rules as it deems necessary for carrying out these regulations and the other duties assigned to it.

27. These regulations shall only apply to or in respect of members of the forces serving in the Canadian Expeditionary forces during the present war; and shall be deemed to have come into force on the fourth day of August, 1914, and shall apply to or in respect of all casualties occurring in the said forces since the said fourth day of August.

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

MATERNITY AND INFANT CARE
IN A RURAL COUNTY IN KANSAS

By

ELIZABETH MOORE



RURAL CHILD WELFARE SERIES No. 1

Bureau Publication No. 26



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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, June 25, 1917.

SIR: Herewith I transmit a report entitled "Maternity and Infant Care in a Rural County in Kansas." This report is the first in a series undertaken for the purpose of learning what safeguards are available for the physical welfare of mothers and young babies in typical rural communities. The study was made under the supervision of Dr. Grace L. Meigs, the head of the division of hygiene of the Children's Bureau. This series of field studies is a direct sequence of the statistical report upon Maternal Mortality in the United States, made by Dr. Meigs last year. In that work the grave urgency of this subject is clearly shown. The outline for the inquiry was prepared chiefly by Miss Viola Paradise, research assistant, and the field work was done by Miss Elizabeth Moore and Miss Frances G. Valentine; the text was written by Miss Moore.

Special mention should be made of the assistance of the State board of health, at whose request the study was undertaken; Dr. S. J. Crumbine, secretary of the board, secured the cooperation of physicians, social workers, and officials, and through the press made clear the purpose of the study. Mr. W. J. V. Deacon, the State registrar, prepared all the preliminary data needed as to vital statistics. Dr. Lydia A. Devilbiss, director of the Kansas division of child hygiene, was of much assistance. The study is based upon interviews with individual mothers, and the general approval with which it was received is shown by the fact that not a single interview was refused the bureau's agents.

In the detailed statements given such changes have been made as prevent identification without impairing the accuracy of the illustration.

The bureau is indebted to Dr. J. Whitridge Williams, Johns Hopkins University, for advice with regard to technical matters connected with maternity care and especially for help in drawing up the standards suggested.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

HON. WILLIAM B. WILSON,
Secretary of Labor.

MATERNITY AND INFANT CARE IN A RURAL COUNTY IN KANSAS.

INTRODUCTION.

OBJECT OF THE SURVEY.

In 1916 the Children's Bureau began its projected studies of maternal and child welfare in country districts. Three of these investigations were undertaken during the year in selected areas in North Carolina, Wisconsin, and Kansas. In the latter two States the studies were planned and carried out upon the same basis and with the same purpose, and both are confined to a much more limited range of topics than the study in North Carolina.

In Kansas, as in Wisconsin, the investigation is an extension of one phase of the study of the causes of infant mortality which the bureau has been carrying on in cities for the past four years. The one aspect of this wide subject which has been especially emphasized in these rural surveys is the conditions affecting the health of the mother during pregnancy and at the time of childbirth. The points covered are the general living conditions of the family, the work done by the mother, the care she received during pregnancy and at confinement, and the cost of such care. The care and health of the babies during their first year of life also are considered.

This question of the care of the childbearing mother was selected for special attention out of the many problems connected with infant mortality because of its great importance in connection with the loss of infant life through premature birth, injuries at birth, congenital weakness, and associated causes, leading to stillbirths and to deaths in the first weeks of life. Statistics show that this group of causes is responsible for about two-fifths of all infant deaths.¹ To this number should be added the loss from stillbirths² and the unmeasured but very great waste of potential life through miscarriages, making altogether a heavy charge against the prenatal and natal causes of death. Obviously any saving at this period can be effected only through the mother, by bringing her and her baby through the period of pregnancy in better health and by giving them

¹ Deaths under 1 year of age in 1915 in the registration area, all causes, 148,561; malformations, premature birth, congenital debility, and injuries at birth, 61,082 or 41.1 per cent of the total. Mortality Statistics, p. 645, Bureau of the Census, 1915.

² In the seven cities in which infant mortality studies have been made by the Children's Bureau the stillbirth rate was found to be 3.5 per cent of the total legitimate births.

both better care at the time of birth. In addition to these general considerations, many letters coming to the bureau from country women, as well as many of those written to the Secretary of Agriculture about the needs of farm women, have made it evident that the problem of securing adequate medical and nursing care at confinement is an extremely serious one for country mothers; that for many of them such care is practically inaccessible, either because of actual isolation or because of the expense resulting from distance from physicians and nurses. Consequently it appeared that the bureau would be neglecting its obligations if it delayed further the study of the conditions surrounding maternity in rural districts.

The information on which the Kansas survey is based was secured through interviews with mothers in the selected territory who had had children born within the two years preceding October 1, 1916. The object held in view in the use of this information has been to present a picture of maternity and infant care in the district studied; and no attempt has been made to show the relationship of particular conditions to the infant mortality rate, as has been done in the bureau's city investigations.

FIELD OF THE SURVEY.

The investigation was located in Kansas, partly because that State was considered typical of a large area of plains country west of the Missouri River which had previously been untouched in the bureau's work; and partly on account of the urgent invitation of the Kansas State Board of Health, which believed that a study by the Children's Bureau would stimulate the rural communities of the State to increase their efforts on behalf of mothers and babies. A certain county recommended by the secretary of the State board of health as typical of the western farming country was chosen for investigation. The study was confined to the farming area of this county—the open country—all of which was covered in the inquiry; the one city and all the villages were excluded.

METHOD.

So far as possible a record was made concerning every birth—whether live birth or stillbirth—during the period of two years from October 1, 1914, to September 30, 1916, occurring in families resident in the country districts of the selected county at the time of the birth. As a first step toward securing these records the names of the parents of all babies whose births or deaths were registered were obtained from the State and local registrars' offices. A canvass was made to find additional unregistered births. In all, 353 schedules were secured, representing 331 families; among these were 4 pairs of twins, so that the records cover the history of 349 confinements.

None of the mothers visited refused to give the desired information, and almost always their cooperation was most cordial. A large proportion of the parents had heard about the investigation through newspaper articles or from friends or neighbors and were ready to welcome the agents when they came. In all but 10 cases the main part of the information was given by the mother herself, with supplementary information from the father in many instances. The remaining 10 records were furnished by others—6 by the grandmother, 2 by an aunt, 1 by the baby's married sister, and 1 by the attending midwife, who was also a relative.

Mothers who had had miscarriages but no live-born or stillborn children within the period of the investigation were not interviewed, and no records were secured for such miscarriages except in two instances where the miscarriage resulted in the death of the mother. These two are not included in the figures for the county. Furthermore, no attempt was made to secure records about illegitimate births. A birth certificate was found for only one illegitimate child in the country districts in the two years covered by the survey, and the agents heard of no others in the course of their canvass.

Schedules were not secured for 78 of the registered births in the country districts, for the following reasons: In 60 cases the family had moved out of the county; in 10, the family was not at home at the time of the agent's visit and it was impossible to revisit; in 8, the family could not be located. Among these births there was 1 stillbirth, and 5 of the children are known to have died.

Instead of reproducing here the schedule used the following typical story is given to indicate the kind of information secured in an interview. The names are of course fictitious, and substitutions from other records have been made in order to prevent identification of the family.

Mrs. Green has a baby, Robert, 15 months old, who was born in September. He weighed 9 pounds at birth and has always been well except for two attacks of diarrhea in the summer, when he was 9 months old, and a bad cold now. He is still nursing, but his mother began to give him bread and milk, crackers, and cereals when he was 6 months old.

There are four children living, all in good health. Mrs. Green, who is now 35, was married when she was 22. The next year she had a stillborn baby, a girl. Two years later her oldest boy, now 10 years old, was born; the following year she had a three months' miscarriage. These first three confinements occurred on a farm in eastern Kansas; for the first two Mrs. Green had a midwife, and after the miscarriage her mother took care of her. The last three children—a boy 8 years old, a girl of 4 years, and the baby—were all born on this farm, and Mrs. Green had a doctor each time.

The day after the stillbirth she called a doctor, because the baby was "mortified" and she feared blood poisoning; he performed a curettage, but did nothing for the severe laceration which had occurred. This laceration has given so much trouble since the last baby was born that her present physician advises

an operation. The second pregnancy almost resulted in a miscarriage at three months and the third one did so. Although no serious complications followed, she was weak for a year afterwards. The last three confinements have been normal.

Mrs. Green has suffered from nausea, varicose veins, and swollen hands and feet during every pregnancy, and especially during the last two. During the pregnancy for which the record was secured she had no prenatal care whatever.

When the baby was born Mrs. Green was attended by the doctor from the nearest village, 7 miles away. She was in labor about 18 hours, during which time the doctor made two visits; he also made one postnatal visit. This fee was \$18.

Mrs. Green stayed in bed 10 days. One of her neighbors came in every day, washed the baby, and "fixed up the bed"; otherwise her husband took care of mother and baby, and did the necessary housework for two weeks. He also did the washing (with the washing machine) during the winter, both the year before and the year after the baby was born; he is too busy to do much during the summer or fall, but he always carries the wash water from the windmill about 40 feet away, even in the busiest times.

Except for such help as her husband and the boys can give, Mrs. Green does all the housework and the family sewing; she does nothing outside the house except to care for the chickens. She is evidently a good housekeeper, as indicated both by her house and by the children's neatness.

Harvest occurred two and a half months before the baby was born, and Mrs. Green had six extra men to board for two weeks; but she had a hired girl for that time. The thrashing crew came three weeks before the baby was born, just when the oldest boy was having the measles; but Mr. Green arranged so that none of the men boarded at the house. In the summer after the baby's birth she could get no help at harvest. It was then that the baby got diarrhea because she was unable to watch what he ate. That fall Mrs. Green cooked for the four grain haulers for three days. Aside from this she has not had to board any hired men.

Mrs. Green has always lived in the country. As a girl she helped with the housework from the time she was 10 years old, but "never did a washing till she was 13"; she also helped with the outdoor chores and "drove teams" in the fields from the time she was 8 years old. After she was 14 or 15 she frequently "worked out" among the neighbors for short periods, and the last two years before she was married she did housework in the city. She has never had any serious sickness, except pneumonia at the age of 12; but while she was working in the city she never felt well.

The Greens have lived on this farm 9 years; during this time Mr. Green has paid for one quarter section (160 acres) of good wheat land and has recently purchased a second quarter, which is still heavily mortgaged. He has built a good barn and granary and a comfortable five-room house. Mr. and Mrs. Green were both born in Kansas of native American parents.

THE COUNTY.

Before the findings of the survey are discussed a brief description is given of the chief economic and social factors—such as the physical characteristics of the county, character of the population, means of communication, type of farm life, and conditions affecting health—bearing on maternity and infant care in the area studied.

LOCATION AND TOPOGRAPHY.

The county studied is situated near the southern boundary of Kansas, about one-third of the way across the State eastward from the Colorado line. In other words, it belongs in the western half of the State, which has a semiarid climate and a comparatively sparse population. It is one of the larger counties in the State, being 30 by 36 miles in extent. With the exception of the valley of the Arkansas River, which crosses it from west to east, and the valleys of a few minor creeks, the whole county is a high, treeless, rolling plain—part of the Great Plains, which extend across half of Colorado and Kansas as well as adjacent States north and south, sloping gradually eastward from the Rocky Mountains. Very little of this plain is absolutely flat, but the variations are slight except in the neighborhood of the streams, where the ground often drops or “breaks” abruptly. The landscape in most places gives an effect of limitless expanse in which the scattered homesteads, with their struggling hedges, are often hardly noticeable. As one approaches the villages the tops of the grain elevators are visible on the horizon long before there is other sign of habitation.

The general level of the plain drops from between 2,600 and 2,700 feet elevation at the western border of the county to 2,400 feet near the eastern border; about half of the river bottom is below the 2,400-foot level.

SOIL AND CLIMATE.

The soil of this high plain, comprising fully two-thirds of the county, is what is called by the Bureau of Soils¹ Richfield silt loam—a soil “well adapted to the growing of wheat,” though “the average yield of wheat when calculated for a series of years is somewhat low, probably not exceeding 10 bushels, and for the average farmer this is barely within the limit of profitable production.” The soil is undeniably fertile; it needs no fertilizer and in some places has produced wheat steadily for 30 years with no apparent exhaustion.

¹ Reconnaissance Soil Survey of Western Kansas, p. 58. U. S. Bureau of Soils, Washington, 1912.

DISKING THE GROUND FOR THE WHEAT.

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OLD AND NEW HOUSES ON A PROSPERING FARM.

A MODEST HOME WITH RUNNING WATER FROM THE WINDMILL TANK.

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The reason why fertile soil, well adapted to wheat, gives such low average yields is largely a matter of rainfall. In this part of Kansas the average annual rainfall is only between 20 and 23 inches,¹ and crop yields are uncertain because of droughts. A good year, one of more than average rainfall, gives fine crops, while an unusually dry year may bring total failure. The selected county is just on the edge of what appears to be the profitable farming belt, at least under present methods of farming; and there is a distinct difference in rainfall and in the resulting prosperity between the eastern and western ends of the county. Moreover, within the same year local showers will sometimes make a considerable difference in crops in neighborhoods not far apart.

The Arkansas River valley, which separates the northern from the southern half of the county, presents very different conditions from the upland plains. The river itself carries little water in the channel; but it has a large subsurface flow which irrigates the adjacent strips of alluvial soil and makes them very valuable, especially for raising alfalfa. This strip of rich land is narrow, not more than a mile or two wide at most. North of this bottom is an irregular strip of rough stony land rising steeply to the bluffs a couple of miles back from the river. South of the river bottom runs a similar strip of sand hills and sandy soil, largely worthless except for pasture.

HISTORY OF SETTLEMENT.

Most of the land in the county, except in the northwestern corner, was taken up in quarter-section tracts by homesteaders about 30 years ago, at the time of the western Kansas boom beginning in 1885. Few of these early settlers are left, however, as nearly all were driven out during the dry years following the boom. It is a common saying that almost every quarter was taken up and relinquished six or seven times before it was finally "proved up." Much land went into the hands of cattle ranchers and speculators after the boom, and only in recent years has been put under cultivation again.

East of the county seat the exodus was not so general as farther west; and in the eastern end of the county there is a large German settlement which dates from the eighties. These families migrated from Ohio to Kansas as a group 30 years ago and have remained largely separate from their neighbors ever since. They intermarry to a considerable extent within "the settlement," and have their own churches. Although in the early days they went through very hard times, they held on to their land; and to-day this neighborhood has the best-developed farms in the county as well as the largest proportion of home owners.

¹ Reconnaissance Soil Survey of Western Kansas, p. 58. U. S. Bureau of Soils, Washington, 1912.

Another and even more distinct community is formed by two small Amish colonies in the southern part of the county. These people are German in origin, a sect of the Mennonite Church; they have a distinctive costume and strict rules as to simplicity of living and hold very little intercourse with outsiders. Within their own group they are closely bound together by relationship as well as by church ties. The Amish families in this county came chiefly from Indiana, most of them less than 10 years ago. They are thrifty, and, in spite of having been poor in the beginning, they have made creditable progress toward farm ownership. A visitor is impressed by the unusual neatness and cleanliness of most of the homes, which go far to compensate for their absolute lack of adornment. German is still the language of family life among these people, though they have been in America for generations. The women are hard workers, following the German custom of helping with the farm work in addition to the housework and care of the children.

PRESENT POPULATION.

Nationality.

As a whole this is a predominantly native American community. Out of the 662 parents in the families visited 505, or 76.3 per cent, were native white of native parentage, while only 19, or 2.9 per cent, were foreign born, 16 of whom were German. Only 4 of the parents could not speak English; these were Russian Germans, 2 of the second generation.

Literacy and intelligence.

The population of the county is also predominantly literate. The 1910 census shows only eight-tenths of 1 per cent of the native white population 10 years of age and over illiterate. Among the farming population there are practically no illiterates; in fact, only one was found among the parents in the families visited. The general level of intelligence—of interest in public affairs, in questions of health, and in the education of the children—also is high. A large proportion of the mothers had read some kind of literature on infant care and were keenly interested in taking their babies to the various "Baby Days" held in the county. The country schools are of the one-room type, but the buildings are well built and well kept; innovations like playground apparatus are not uncommon, and a general interest in school efficiency is manifest. There is a high school in each of the incorporated villages as well as in the county seat, and these high schools are well attended by country children.

Community centers.

The county seat, a city of about 4,100 inhabitants, is the community center for the whole northwestern section of the county. Besides this one city there are three incorporated and three unincorporated vil-

lages. These are all small villages according to urban standards, ranging from 76 to 778 inhabitants. But the two largest are important local business and social centers and boast of "city" water supplies. All of these villages, in fact, except the smallest one, are important to their surrounding communities, providing churches, stores, physicians, and mail and shipping facilities.

Density.

According to the Kansas State census for 1915 this county had 13,152 inhabitants—an increase of 15 per cent since 1910.¹ The six villages, together with the county seat and the State soldiers' home, had a combined population of approximately 6,900,² which leaves 6,250 people in the open country—that is, the area covered by the survey—or a rural density of 5.8 persons per square mile. The density of the rural population in the three townships on the eastern border of the county is 7.6 per square mile, while in the four townships on the western border it is only 4 per square mile, illustrating the increasing sparsity of settlement as one goes westward. In the extreme northwestern township, which is the most arid and least thickly settled of all, there were only 2.2 persons per square mile.

MEANS OF COMMUNICATION.

Railroads.

Two transcontinental railroads and two branch lines cross the county, with stations at intervals of not more than 10 miles and one or more grain elevators at every station. Consequently the county is well provided with means of travel; and the shipping facilities would be sufficient if it were not for shortages of railroad cars, which often prevent the farmers from marketing their grain when they wish.

Roads.

The roads in this district, as throughout western Kansas, are usually in excellent condition, thanks rather to the climate and the nature of the soil than to any work put upon them. No attempt is made to surface the country roads in any way (except for a few miles of sandy road along the river which have been covered with cinders), and a heavy rain makes them almost impassable. Such rains, however, are infrequent, and the dirt packs hard and smooth again in a surprisingly short time. Certain of the main roads are designated "county roads" and are kept well graded and dragged; the rest receive practically no attention except that necessary culverts are

¹ The population more than doubled in the preceding decade, 1900-1910. (U. S. Bureau of the Census.) According to the State census the increase between 1915 and 1910 was 4 per cent.

² Incorporated places from State census. Unincorporated places from postmasters' estimates. Soldiers' home from commandant's statement.

built and kept up. But in this fortunate country a mere wagon track across the plains soon makes a good road. A large proportion of the country^afamilies, especially among the land owners, have automobiles to enable them to take advantage of their good roads.

Telephones.

Telephone facilities extend throughout the county; more than two-thirds of all the families visited had telephones in their homes, only four were farther than a mile and a half away from a telephone, and none had to go more than 3 miles to reach one. This is particularly advantageous in a community where the distances are so great and the homes so widely scattered.

CHARACTER OF FARM LIFE.

Size of farms.

It has been shown already how sparse the population is—hardly one family to the square mile in the western part of the county and less than two in the eastern end. The census of 1910 shows that of the farms in the county three-fourths contained at least 260 acres and nearly one-third were as large as 500 acres. Of the farms visited two-thirds were farms of 320 acres or more; and the consensus of opinion is that 320 acres—a half section—of reasonably good land is the least upon which a farmer can expect to make a comfortable living. All this means that next-door neighbors are often a mile or more apart, and “town” may be anywhere up to 20 miles away. Although houses may be easily distinguished from a distance of 2 or 3 miles, yet from many places out on the plains there is hardly a dwelling in sight in any direction.

Chief crop.

Winter wheat is far and away the main crop of this part of the country.. According to the report of the Kansas State Board of Agriculture for 1914 four-fifths of the acreage of planted crops in the county was in wheat; and 85 per cent of the total crop values were due to the wheat crop. Oats and spring crops—corn, kafir corn, etc.—are raised on most farms, mainly for feed; but none of these grains, nor all of them together, approach anywhere near the importance of the wheat. In fact, wheat stands in almost as predominant a relationship to the material well-being of the farmers of this territory as cotton does in the cotton States. In discussing how he is getting along, almost any farmer or his wife will tell of his wheat crop—its acreage, yield, and price—with hardly a thought of anything else.

The life of the typical farm revolves around the wheat crop. Work is active in the fall when the wheat ground is being plowed or disked and the wheat is being sown; after that there is not much to

do, unless an unusual amount of stock is kept on the farm or spring crops are raised, until the following June when the wheat again demands attention. At this time comes the great work crisis of the year—the wheat harvest, employing from 3 to 15 men for two or three weeks—men whom the farmer must usually snatch from the incoming trains and whom the housewife must manage to board. Wheat thrashing usually follows some time in the summer, but lasts only a few days. If spring crops are raised to any great extent, the busy season extends through a much longer period, from spring through corn husking or kafir thrashing, which often comes late in the winter; but there is no such time of concentrated stress as the wheat harvest.

Economic situation.

At the time of the survey wheat crops had been satisfactory for the past few years, and wheat was bringing in the neighborhood of \$1.75 a bushel, which was then regarded as a phenomenally high price. Consequently a general atmosphere of good times prevailed in spite of the total failure of the corn crop in the current year. Aside from the car shortage there seem to be no marketing difficulties, as farmers' associations own cooperative grain elevators at nearly every railroad station. Average wheat crops for the current year ran about 13 to 15 bushels, though some farms produced as much as 20 bushels or more to the acre.

Tenantry.

A serious feature of social conditions in this county is the large proportion of farms in the hands of tenants. At the time of the 1910 census this proportion was 34 per cent of the total; among the families visited in the survey it was 38 per cent, not including those who rented land from their parents. In the decade between the 1900 and 1910 censuses the number of tenant farms increased from 73 to 374, while the number in the hands of owners increased from 484 to 722; that is to say, the majority of the newcomers were tenants and the proportion of tenants rose nearly threefold. At present tenantry is distinctly more prevalent in the western or more recently settled half of the county than in the eastern half. This fact seems to indicate—as do many individual histories—a wholesome tendency for the new settlers who start out as tenants to become landowners. Whether this tendency will continue in the face of the rise in land values remains for the future to show. It must be borne in mind in this connection that many of the older settlers homesteaded their land, but that now there is practically no free land left. At present, the customary rental charge of one-third of the grain crop allows an enterprising and capable farmer to “get ahead” and buy land in the course of time. But many of the renters move about from place to

place, forming a transient, unattached, thriftless element in the community, their very names unknown to many of the neighbors. For example, one family moved four times in 13 months, another three times in 7 months. The houses on most rented farms are decidedly inferior to those occupied by landowners; many of them are poorly built and in wretched condition. And it frequently happens that, in addition to the handicap of inadequate farm buildings, renters have insufficient capital to farm profitably, and their whole standard of living is much below the general level.

Many landowners rent land in addition to that which they own, in order to extend the scale of their farming; but they are by no means in the same economic status as the tenants and are not so counted; for they are not transients, and they usually own the homes in which they live. For similar reasons those farmers who operate land belonging to their parents—an appreciable number among the younger folk—do not belong in the tenant class, whether or not they pay rent, for they have a permanent interest in the community and usually have the advantage of farm buildings and dwellings such as an owner ordinarily puts up for himself but not for tenants.

HEALTH.

No investigation of general sanitary conditions was included in this survey. It is worth noting, however, that the general climatic conditions—the elevation and the dry atmosphere—are favorable to good health. So also is the character of the water supply. Practically all the water used throughout the county is taken from drilled wells more than 100 feet deep, which draw from uncontaminated ground-water strata.¹ Open wells, such as are found in many country districts, are very rare. Hence, though the water is hard it is reasonably safe from pollution.

Vital statistics.

The death rate for this county has been for several years somewhat above that for the State. But it should be noted that Kansas as a whole has a remarkably low death rate, about 2 per thousand below that for the rural part of the registration States. Moreover, the rates for the county are stated by the secretary of the State board of health to be increased by the deaths of patients brought from outside the county to the hospitals in the county seat.

¹ Statement of the secretary of the State board of health.

TABLE I.—*Death rate per 1,000 population.*^a

	1912	1913	1914	1915	1916
Selected county.....	11.8	12.4	13.5	10.9	13.5
State of Kansas.....	10.2	10.6	10.5	10.7	11.7
Rural part of registration States ^b	12.4	12.7	12.3	12.3	.....

^a Derived from Second Biennial Report of the Central Division of Vital Statistics, Kansas State Board of Health, 1914-15; from data furnished by the State board of health; and from Mortality Statistics, Bureau of the Census, 1913, 1914, and 1915.

^b Includes all places of less than 10,000 population in 1910 in the death-registration area.

According to the State birth-registration figures this county has a birth rate which is not only one of the highest in the State but also is considerably in excess of that for the State as a whole, or for the birth-registration area of the United States which was 24.9 per 1,000 in 1915.¹ As shown in Table II, the rate for the county studied was 29 per 1,000 or higher every year for the past five years. Of the six other Kansas counties which had birth rates higher than 29 more than once in the four years 1912-1915, all but one are immediately adjacent to the one studied, so that evidently a high birth rate is characteristic of this part of the State. In each of the past three years the county seat appears to have a higher birth rate than the rest of the county; possibly this is due, at least in part, to more complete birth registration in the city.

TABLE II.—*Birth rate per 1,000 population.*^a

	1912	1913	1914	1915	1916
Selected county.....	35.4	29.0	33.2	29.9	31.0
County seat.....			37.9	35.8	35.2
Rest of county.....			31.0	27.2	28.9
State of Kansas.....	22.5	21.0	21.2	22.2	24.0

^a Derived from Second Biennial Report of the Central Division of Vital Statistics, Kansas State Board of Health, 1914-15, and from data furnished by the State board of health. Rates for the rural part of the registration area are not available.

In this community a high infant mortality² rate does not accompany a high birth rate. In contrast to its general death rate, the county of the survey had in 1914 a lower infant mortality rate than the average for the State, and also in both 1914 and 1915 a rate lower than those found in other States. The rate for the birth-registration area of the United States in 1915 was 100 per 1,000 births; only one State—Minnesota—had a rate lower than 85, while in 6 of the 10 birth-registration States the rate was higher than 100.³

¹ Birth Statistics for the Registration Area of the United States, p. 10, U. S. Bureau of the Census, 1915.

² Infant mortality rate, as the term is used in vital statistics, means the ratio between the number of deaths under 1 year of age and the number of live births in the same period.

³ Birth Statistics for the Registration Area of the United States, p. 10, U. S. Bureau of the Census, 1915.

TABLE III.—*Infant mortality rate per 1,000 live births.*¹

	1914	1915	1916
Selected county.....	62	71	92
County seat.....	75	88	113
Rest of county.....	55	61	79
State of Kansas.....	77	70	69

¹ Derived from Second Biennial Report of the Central Division of Vital Statistics, Kansas State Board of Health, 1914-15; from data furnished by the State board of health; and from birth and death certificates for the county.

The figures in Table III show that the rate for the county seat was over one-third higher each year than that for the rest of the county; but here again the real facts are obscured to some extent by deaths of children brought from the country to the city hospitals.

It should be noted that the rates for the county and also for both subdivisions were higher in 1915 than in 1914, and much higher in 1916 than in either of the preceding years; also that in this last year this county had a higher infant mortality rate than the State.

Causes of infant deaths.

In the two years 1914 and 1915, 22 of the 53 infant deaths occurring in the county were due to malformations and diseases peculiar to early infancy; outside of the city 13 of the 29 deaths were due to this group of causes, or about the same proportion. In 1916, 14 out of 39 deaths in the county and 7 out of 21 outside of the city belonged in the same group. Taking the three years together, or any one year, malformations and "early infancy" are responsible for a larger number of deaths than any other group of causes; but they are not responsible for the sharp rise in the mortality rate in 1916.

Both in the county as a whole and outside of the city the number of deaths from gastric and intestinal diseases in 1916 alone exceeded the number in the two preceding years. That is to say, in 1914 and 1915 there were 10 deaths from these causes in the county, but in 1916, 12 deaths; and similarly outside of the city, 4 deaths in the two years but 6 in 1916. In July, August, and September of that year there occurred in and around the county seat an outbreak of infantile diarrhea, which loomed large in the minds of parents, doctors, and nurses. In fact, 11 children under 2 years old died from diarrhea in these months; but only 4 of these were under a year old, which number will not account for the high infant mortality rate for the year. On the contrary, the records show that deaths from diarrheal diseases were excessive throughout the year and throughout the county.

Contagious diseases.

During 1916 there were reported to the county health officer 229 cases of measles, 28 of scarlet fever, 24 of chicken pox, 10 of diphtheria, 7 of whooping cough, 1 of infantile paralysis, and 87 of smallpox. Measles seems to be unusually well reported; but the same can hardly be said of whooping cough, for the mothers visited told of fully as much whooping cough as measles in their families. An epidemic of measles which occurred earlier in the year in the city and in the southwestern quarter of the county was responsible for most of the cases of that disease reported.

The cases of smallpox were due to two outbreaks in the spring, in the city and in one of the villages. The latter was widespread, but no deaths resulted.

Compared with the fatalistic attitude common in many localities, the parents in this community seem as a rule to be careful in avoiding exposure of their children even to the milder contagious diseases. At the time of the survey little trouble was experienced from any of the ordinary children's contagious diseases, except for a diphtheria scare in the city from which only five or six cases developed.

Public-health activities.

In Kansas the county is the local unit for rural public-health administration. The county board of health consists of the county commissioners and a county health officer appointed by them. There are no township health officials, consequently the county officer has an extensive field to cover.

At the time of the survey this county was fortunate in having an active, interested health officer—a local physician who had obtained special training for his duties by attending the course for county health officers given by the State board of health. Unfortunately the low salary paid—\$250 a year—threatened to deprive the county of his services for the following year.

The health officer's duties embrace the inspection of stores, restaurants, slaughterhouses, etc., the sanitary inspection of schools, and the control of contagious diseases. During his term the officer of this county had twice inspected the stores, restaurants, and slaughterhouses throughout his territory and had visited "about half a dozen" of the 67 schoolhouses of the county. His activities were largely concentrated on the prevention of the spread of contagious diseases. He visited promptly every locality where there was an outbreak and had done much traveling for this purpose. In addition, he took an active part in the "Baby Days" held in the county. Obviously, he had performed far more service than the community was justified in expecting for the salary paid.

The social-service league of the county seat employed a visiting nurse—who was a graduate of the State board of health's training course for public-health nurses—during six months of 1916 and expected to continue this work in 1917. The city and the county each contributed \$15 a month toward the nurse's salary; the remainder was raised by private subscription. Her work was confined almost entirely to the city.

The most significant undertaking of the year, from the standpoint of children's health, was the series of "Baby Days" inaugurated by the visiting nurse and carried out by local physicians and dentists in the county seat and three of the villages. Young children were given physical examinations according to a plan recommended by the State board of health, in which the American Medical Association score card was used; but no prizes were given. These examinations aroused a great deal of interest throughout the county; more children were brought to each examination than could be admitted. At the largest meeting 60 children were examined by 4 physicians and 2 dentists.

The spontaneous response to this opportunity, as well as the enthusiasm of the doctors in face of the arduous work involved, indicates a very promising field for public-health work. It seems probable that the project of inducing the county commissioners to employ a public-health nurse for work throughout the county, which is being discussed in the city, would be received with favor by the country constituency.

FINDINGS OF THE SURVEY.

FATHER'S OCCUPATION.

All but 3 of the heads of the 331 families visited were engaged in farming; 317 were farmers, 2 farm managers, 8 farm laborers, and 1 had as his chief means of livelihood the operation of a thrasher. Five of the farmers also worked as farm laborers part of the time; 6 operated thrashers; and 9 had some other supplementary occupation. Of the 3 fathers not engaged in farming, 1 was a storekeeper, 1 a railroad station agent, and 1 a rural mail carrier.

The small number of families found who depended upon farm laborers' wages is a reflection of the extremely seasonal character of farm work in this district. Wages are high during a few months in the busy season, but during the winter a laborer of any kind finds almost nothing to do; hence the bulk of the hired labor is done by a migratory class.

PLACE OF CONFINEMENT.

As has been stated, all the mothers with whom this study is concerned were resident in the country districts of the selected county at the time of confinement. Some of them, however—17 in all—went for their confinement care outside of the area covered in the survey; 3 of these went to relatives outside of the county, 10 went to hospitals in the county seat, and 4 stayed with relatives in the county seat or in one of the villages in the county. Five others went away from their own homes in order to be with relatives but stayed within the country districts of the county.

MATERNITY CARE.

Attendant at birth.

Almost all (95 per cent) of the 332 births in the rural districts were attended by a physician; but in 42 cases the doctor did not arrive until after the birth of the child; and in 10 of these not until an hour or more afterwards. Twelve births were attended by a midwife, 3 by a neighbor, and 3 by the father only; 1 was attended by both a physician and a midwife.

Midwives.

Kansas makes no provision for licensing midwives; the only law in which the existence of such persons is recognized is the birth-registration act. There are no professional midwives in this terri-

tory, for no one could possibly make a living from the few obstetrical cases to which midwives are called. The 12 births mentioned above were attended by 7 different women, who are classed as midwives because they have had experience in this work, take charge of confinement cases on their own responsibility, and are considered by the neighborhood competent so to do. Three of these women had 2 cases each in the 2 years, and 1 had 3 cases; the others had only 1 each in that period. Of the 3 who were interviewed the first had attended 11 cases in 10 years, the second 6 cases in 10 years, the third 15 cases in 7 years. The last—a young native-born woman who had taken a course in midwifery—would gladly have had more practice; the others did the work primarily as a neighborly accommodation, making no regular charge but often receiving presents for their services.

In the 12 families served by midwives, however, they have been an important factor and are evidently preferred to physicians. Out of 76 confinements in the history of these families 53, or more than two-thirds, had been attended by midwives and only 18 by physicians; of the 49 children born to these 12 families in this county 29, more than half, were delivered by midwives and only 13 by physicians.

Obstetrical service by physicians.

The county is well supplied with physicians. Twenty-five doctors attended the births included in this study; 10 of them attended 10 or more cases each, or 273 cases in all. Eighteen of these doctors are located in the county and the others in near-by towns in adjacent counties. The county seat has 8 practicing physicians; each of the villages of 100 population or more has at least 1, while the two largest each have 2.

Probably no home in the county is more than 20 miles from a doctor. All but four of the families visited had a doctor within 15 miles when the baby was born; more than 80 per cent had a doctor within 10 miles and 32 per cent within 5 miles. Even 20 miles is not a prohibitive distance in this country of smooth level roads where, under normal circumstances, the doctor's automobile can cover that distance within an hour of receiving a call. More than one mother remarked, in discussing the subject, that since the coming of the telephone and the automobile distance made no particular difference in getting the doctor. Nearly half (19) of the physicians, it is true, who were late in reaching their obstetrical patients came 10 miles or more; but two-thirds (13) of these were less than an hour late—several only a few minutes. Some chance, such as a flood in the river, a winter storm, the doctor's being "out on a case," a delayed summons, or a brief labor is more likely to be the cause of the doctor's failure to arrive on time than is distance.

That distance is not a serious obstacle to securing medical care in this territory is further indicated by the fact that for 46 confinements some other than the nearest physician was called, from a distance averaging 7 miles greater than that to the nearest doctor. In 17 instances the attendant physician came from 15 miles or more away, though, as has been seen, only 4 families needed to send so far for a doctor.

The fact that a physician can serve a large area makes a choice of doctors possible to most families in the county—a privilege not always available even in much more densely settled districts than western Kansas. This seems to be a factor in the general satisfaction with the medical situation.

The available evidence tends to indicate a comparatively high standard of obstetrical service at the time of confinement. None of the mothers complained of neglect during the period covered by the survey. Instrumental deliveries were rare, only 16 cases out of 349; and the stillbirth rate is low. With one exception all the lacerations which seem to have been severe were repaired.

On the other hand, postnatal supervision of obstetrical patients is much less common than might be expected from the general high level of medical practice. In 136 out of 314 confinements attended by physicians in the open country no return visit was made; in 128 cases one visit; and in only 48 cases more than one visit. In part this failure to make return visits depends on distance from the patient, for the proportion of cases receiving no postnatal visits increases markedly as the distance increases. (See Table IV.) In part, also, it is a matter of the habit of individual physicians; some doctors make return visits to almost all their obstetrical cases, while others revisit almost none.

TABLE IV.—*Number of postnatal visits, by distance from physician.*

Distance from attending physician.	Mothers attended by physicians in country districts, receiving specified number of postnatal visits.					
	Total.	No visita.		One visit.	More than one visit.	Not reported.
		Num-ber.	Per cent.			
Total.....	314	136	43	128	48	2
Less than 3 miles.....	31	2	6	15	14	.....
3 to 4 miles.....	61	14	23	37	10	.....
5 to 9 miles.....	134	57	43	56	20	1
10 to 14 miles.....	71	48	68	18	4	1
15 miles or more.....	17	13	88	2	.....	.....

The most common fee for attendance at childbirth is from \$15 to \$20, which was the charge in half of the 266 cases for which this

information was secured; in over three-fourths of the cases the physician's charge was from \$15 to \$25. The fee is seldom less than \$15 or as high as \$30. Except in complicated cases the number of visits made by the physician does not seem to influence his charge, nor does the distance he travels unless it exceeds 15 miles. (This is true only of obstetrical fees, for the rate for an ordinary visit is usually based on a mileage charge.)

Hospitals.

The county has three hospitals—two of 16 and 25 beds in the county seat, and one of 10 beds in one of the villages. All are physicians' private hospitals. These hospitals reported caring for 60 obstetrical cases in 1916,¹ the great majority in one hospital.

Ten country mothers went to the hospitals for confinement during the two years of the survey. Neither mother nor baby died in any of these cases. Four of these women went to the hospital as the most convenient arrangement. Two were in poor health, one with symptoms of toxemia and the other much weakened by a miscarriage and repeated lacerations. The other four had more serious complications, including one case of convulsions, one Cæsarean operation, one premature birth following a fall, and one case where the doctor expected to use instruments; each of these women was taken to the hospital from a distance of 10 to 16 miles, after labor began. On the whole, therefore, the hospital still seems to be generally regarded as a last resort; the custom of making use of hospital facilities is hardly as well developed as might be expected in view of the community's intelligence upon health matters and the availability of hospitals.

The ordinary hospital charge is \$20 a week with physician's fee (\$15 for normal labor) in addition, or \$25 a week including the doctor's services. This makes the usual expense of a confinement at a hospital amount to between \$50 and \$60. In this district, therefore, hospital care costs but little more than does care at home if the family pays for nursing instead of relying on unpaid help. For example, one mother paid \$50, including doctor's fee, for two weeks at the hospital when her first baby was born; when the second baby came, she stayed at home, paying \$18 for one visit from the doctor and \$26 for a practical nurse who also did the housework for three weeks. Of course, where there are other children some provision must be made for the housework whether or not the mother goes to a hospital.

¹ The reports cover 12 months for one hospital, 11 months for another, and 5 months for the third, which opened in July, 1916.

Nursing care and household help at confinement.

Trained nurses are not impossible to secure for those who can afford them, since both of the city hospitals give nurses' training courses. Eighteen mothers who did not go to a hospital had a trained nurse, in most instances at the standard rate of \$25 a week, or a total expense in different cases of from \$25 to \$60. As might be expected, the incurring of such an expense is confined to the more prosperous families; 16 out of these 18 families belonged to the land-owning class; and in all of them the father was farming at least a half section (320 acres) of land.

Several of the doctors, when attending confinements, frequently take a trained nurse or a hospital pupil nurse along with them to act as an assistant at the delivery; such a nurse washes the baby and makes the mother comfortable before leaving, but does not stay with the patient. One doctor who had a large practice did this regularly, making no extra charge for the nurse; other physicians usually charged \$3 or \$5. When, as often happens, the household provides only inexperienced assistance—a daughter or husband or a more or less incompetent hired girl—the services of a nurse even for this short time are of the greatest value both to the doctor and to the mother.

In addition to the mothers who had a trained nurse, 53 others had at least partially trained care by a midwife or a practical nurse (usually called in this neighborhood an "experienced woman"). Such attendants, however, are scarce and often difficult if not impossible to secure. In the great majority of cases the mother had to depend upon an untrained hired girl, a member of the family, a relative, or a neighbor. A very common arrangement is for a neighbor to come in daily to wash the baby, while some member of the household gives all the rest of the nursing care.

The amount of nursing done by the fathers is worth noting. In 16 cases the father took all the care of the mother, though usually—but not always—some one else attended to the baby. One father said: "I have waited on my wife both times according to the doctor's directions, thereby saving the price of a nurse"; this same father did the housework for two or three weeks after the first baby came; but the second time the family had a hired girl. In two large families visited the father had delivered most of the children, and in another family the mother insisted upon his officiating at the last two births, because it worried her to have an outsider around. In 19 cases the father did all the housework while the mother was sick.

As has been said, the absence of a competent "experienced" nurse is often due not to considerations of expense so much as to difficulty in getting anyone to help. For instance, in one prosperous family the mother said that, as she could get no one to come in, she took care of

the baby herself from the day after it was born, while her oldest girl (15 years old) waited on her and brought her what she wanted. Another mother's account was that her daughter of 15 did all the housework and that she took care of herself and the baby; the daughter brought things to the bed for her to wash and dress the baby with, and under her direction did whatever she could not do herself. In another instance a neighbor came in the day the baby was born and once afterwards to "fix things up"; after the third day the mother got up and attended to the baby and even made the bed herself.

About half of the mothers visited had hired household help at the time of childbirth; nearly one-fifth had help during the latter part of pregnancy. Such help is rather more common on the larger farms (320 acres or more) than on the smaller ones, but usually absence of hired help is not to be attributed to poverty. Sometimes, it is true, the help which relatives can give seems sufficient; but more often the family would have had a hired girl if a good one could have been found. As in all country districts, household help is scarce; but the dearth does not seem to be as absolute as it is in many places, partly perhaps because the farmers are able and willing to pay fairly good prices for such help at times of stress.

So few women except trained nurses were employed to do nursing exclusively that they hardly count in an estimate of the nursing expenses of childbearing. Most of the "experienced women" and nearly all the hired girls who did childbed nursing did the housework also. The usual wage for a woman taking charge of the household at such a time and doing more or less nursing was \$1 or \$1.50 a day; a girl doing ordinary housework without taking much responsibility was commonly paid \$4 or \$5 a week.

Considering only those (332) confinements which took place in the country we find that in 142 cases the mother had no expense for either nursing or household help at that time; that is, all such work was done by members of the family, relatives, or neighbors. In the other 190 cases some expense was incurred for these services, either for nursing or housework, or both. In more than half of these cases where the cost was obtained this item in the budget was less than \$20; in nearly two-thirds it was less than \$25; in only one-eighth was it greater than \$50. The amount spent depends mainly upon the length of time for which help is kept; the figures given above cover a maximum period of 12 weeks—6 weeks before and 6 weeks after confinement; but the minimum was sometimes as short as 3 days. As a matter of fact, 19 mothers had help for more than 6 weeks before confinement and 18 for more than 6 weeks afterwards; but the expense for these additional weeks has not been included in considering the costs of childbirth.

Prenatal care.

In one-third (119) of the pregnancies which occurred in the two years of the survey the mother had *some* prenatal care from her physician. How adequate this supervision was, however, is a different question.

In order to be able to classify the care received by mothers during pregnancy the following outline has been drawn up, after consultation with Dr. J. Whitridge Williams, professor of obstetrics, Johns Hopkins University, as representing a fair standard for *adequate* medical prenatal care:

1. A general physical examination, including an examination of heart, lungs, and abdomen.

2. Measurement of the pelvis in a first pregnancy to determine whether there is any deformity which is likely to interfere with birth.

3. Continued supervision by the physician, at least through the last five months of pregnancy.

4. Monthly examinations of the urine, at least during the last five months.¹

Though this standard is no higher than is necessary to insure the early detection of abnormal symptoms and conditions, it is not a standard which is generally attained in private or public practice, either in cities or in rural districts.

Comparing conditions as reported by the mothers with this standard, we find that six of the patients who are counted as having prenatal care because they sent the urine to the doctor for examination never saw the doctor at all during pregnancy, though in some instances he sent them medicine. Sixty-nine patients who saw the doctor had no general examination. Fifty-nine had no analysis of the urine. In no case was the pelvis measured with the calipers, in spite of the fact that 42 of these patients were carrying their first babies. About two-fifths of the patients saw the doctor only once; in 28 of these cases the one consultation with the doctor, with no general examination, was all the prenatal care given.

In only two cases, neither of them a first pregnancy, could the care received be counted as adequate; in four other cases it would have been adequate, since there was continued supervision and repeated urinalyses, except for the fact that the patients were primiparae and no measurements of the pelvis were made. In 18 cases, none of which was a first pregnancy, there was a physical examination, one or more urinalyses, and some supervision, though not enough to make the care adequate; these are classed as having fair care. All the rest (99) of the women either were primiparae and had no measurements taken, or else they lacked one of the other essentials. For example,

¹ See *Maternal Mortality*, pp. 12-13. U. S. Children's Bureau publication No. 19.

a women in her first pregnancy, in poor health and under the doctor's care all the time, had no general examination and no urinalysis. Another mother, who sent the urine for examination daily during the last two months of her first pregnancy, never saw the doctor until the time of confinement. Another mother, who was bloated, vomited, and had dizzy spells all through her first pregnancy, went to the doctor in the second month. He made no examination nor analysis of the urine, though he told her she had kidney trouble; he merely gave her some medicine "which did no good," so she never went back. At eight months she had eclampsia.

As a rule the mothers who feel themselves to be in poor health during pregnancy are the ones who resort to the doctor. Among the 119 who had prenatal care, only 22 reported that they felt well during pregnancy; 34 had minor ailments such as backache, nausea, cramps, headaches, swollen hands and feet, or varicose veins; and the rest had some more serious trouble. Few women in this community recognize that it is wise to consult a physician during pregnancy whether or not they feel normally well. On the other hand the fatalistic assumption that a pregnant woman may expect to be thoroughly miserable is much less common than in many other places. Most of these women, if they feel sick, make some attempt to get relief from the doctor even if only by sending for medicine. Doctoring with patent medicines is occasionally tried but is not common.

The cost of prenatal care in this community is difficult to determine, because it is frequently either included with the doctor's obstetrical fee or lost track of in the general family bill. In the majority of cases where a report could be obtained the cost was less than \$5. Apparently no charge is ordinarily made for urinalysis; most consultations with the doctor take place at his office, for which the fee is never high; and only when some serious complication calls the doctor to the home is any considerable expense involved. That cost is seldom a determining factor in calling upon the doctor is further indicated by the fact that in this district prenatal care is no more common among the well to do than among the poorer families.

Cost of childbearing.

An attempt was made to find out how much it costs to have a a baby in this part of the country. This estimate of costs covers only the services connected with the birth—prenatal care, obstetrical fee, nursing, and extra household help for the confinement period—and does not include equipment of any kind, such as medicine, nursing supplies, or the baby's clothes.

The ordinary range of the different items of cost thus included has been already described. The total cost for these services was obtained for 249 cases¹ (the other mothers being unable to give this information), and was as follows:

Cost of confinement.	Number of confinements.
Total.....	249
Less than \$50.....	198
Less than \$25.....	114
No cost.....	4
Less than \$5.....	1
\$5 to \$9.....	6
\$10 to \$14.....	13
\$15 to \$19.....	53
\$20 to \$24.....	37
\$25 to \$29.....	28
\$30 to \$39.....	29
\$40 to \$49.....	17
\$50 to \$59.....	18
\$60 to \$69.....	11
\$70 to \$79.....	7
\$80 to \$89.....	5
\$90 to \$99.....	4
\$100 or more.....	6

From these figures it appears that nearly half (46 per cent) of the babies cost their parents less than \$25; that four-fifths (80 per cent) cost less than \$50; and that the expenses of the birth of the large majority (63 per cent) came to between \$15 and \$40.

Of the 22 cases where the costs were markedly higher than the general rule—that is, \$70 or more—2 were hospital cases with serious complications; in 4 cases the cost for physician's services outside of the hospital exceeded \$25; in 7 cases a trained nurse was employed; and in 9 cases the expenditure for household help and nursing (exclusive of trained nurses) was \$50 or more. Apparently, therefore, unusually high expenses of childbirth are much more apt to be due to the cost of nursing and household service than to medical fees.

COMPLICATIONS OF CONFINEMENT.

Among the 349 confinements concerning which records were secured in this study there developed 2 cases of eclampsia. Four of the children were stillborn. Sixteen deliveries were effected with instruments. One Cæsarean section and 2 versions were performed. In the rural parts of the county during the period studied 3 deaths occurred from puerperal septicemia, 2 following miscarriages, and 1 following a full-term birth. So far as could be learned, these were the only deaths in this area from causes connected with childbirth.

During their whole child-bearing history the 330² mothers had had 1,269 pregnancies, of which 63 (5 per cent) resulted in mis-

¹ Including confinements in a hospital, but excluding others where the mother went away from the country district of this county.

² The history for one mother, secured from the grandmother, was too incomplete to use.

carriages and 23 (1.8 per cent) in stillbirths. Of the 1,216 children carried to at least seven months' term 73 were delivered with instruments; 48 of these were first-born children. That is, 14.5 per cent of the first-born children of these mothers and only 2.8 per cent of the subsequent children were delivered with instruments. There was only one fully developed case of eclampsia besides the two in the survey period, but in one other instance the doctor forced an eight-months' birth "because he feared spasms."

MOTHER'S WORK.

The work which a mother does during pregnancy and within the first months after childbirth is a possible direct cause of injury to her and to her baby. So, also, her ordinary duties and the work which she did in girlhood have an important influence upon her health, and presumably therefore affect her children's vitality.

As would be expected in a farming community, the mothers of this study did practically no work away from home; two laborers' wives hired out for a few weeks to cook for harvest hands or thrashers, but that was all. Consequently the problem of the work the mothers did during the period of the survey resolves itself into a question of housework and work on the home farm. Of these, housework is much the more important in this district.

Cessation of work before childbirth.

It already has been shown that about 1 in 5 of the country mothers had hired help with her housework during the last weeks of pregnancy. Often such help is primarily a precaution to insure having some one on hand when needed, but in some cases the hired girl relieves the mother of most of her work. Generally, however, pregnant mothers keep up their usual round of duties until labor begins, unless they are disabled by serious ill health.

Resumption of work after childbirth.

In this community two weeks is well established as the shortest period that should elapse after confinement before a woman undertakes any great amount of work; and often the heavier housework such as washing and ironing, and the out-of-door chores, are not resumed for two or three months. Ten days in bed is the prevailing standard for recuperation after childbirth, but normally a mother who gets up after 10 days does no work within the fortnight.

Less than 1 in 10 of the mothers visited got up from bed before the tenth day; less than 1 in 40 under a week. Pressure of work does not often seem to be an important factor in inducing the women of this part of the country to get up too soon, for out of 7 who were up in less than a week, 3 did no work for two or three weeks; 3 did

some work after one week but had help for two or three weeks; only 1 did any of her regular work within the first week, and she did nothing but the cooking during the first two weeks.

Usual housework and help.

Leaving out of account the period immediately preceding and following confinement, we find that only 16 mothers—1 in 20—had a hired girl as a regular or usual assistant; 73 had a sister, mother, or daughter 14 years or older to help them; and 33 reported that they had more or less help from their husbands. The rest—about two-thirds of the whole number—managed their housework alone or with some help from the boys or younger girls. The amount of work the mother has to do depends also to a great extent upon the size of the family. Moderately large families—of seven or eight people—are numerous, forming almost as large a proportion (28 per cent) of the total as do the small families of three or four (30 per cent). The typical family has several children who are too small to be of any help to the mother but are, on the contrary, a decided addition to her burdens.

The farmhouse.

The typical farmhouse¹ has from three to six rooms, most commonly four, all on one floor. Most of the houses, except on some of the tenant farms, are fairly well built and in good repair; but many are needlessly inconvenient for the housewife. As one renter's wife said when asked about conveniences, "I mostly had *inconveniences*." Occasionally one comes upon a farmer who has just taken hold of his own land, and is temporarily housing his family in a one or two room shack; but such pioneer conditions are rare. Probably the most serious housing problem is the difficulty some renters have in finding any house to live in or, at least, any decent accommodations.

Room crowding is fairly common in these farm homes, and the inevitable confusion must add appreciably to the housewife's labors. Nearly half (45 per cent) of all the homes had more than one occupant per room, counting all the rooms in the house and not including the baby; one-sixth (16 per cent) had two or more occupants per room, which makes a distinctly overcrowded household. As might be anticipated, the homes on the smaller farms (under 320 acres) are more often crowded than on the larger ones.

Water supply.

Almost every farm is provided with a windmill; in spite of the fact that a drilled well with its mill is an expensive piece of equipment, it is fortunately accepted as essential. And as the western plains are

¹ All house information is for the house where the parents were living when the baby was born.

notoriously windy, the water seldom has to be pumped by hand; except that, as one farmer explained, "The wind 'most always gives out at harvest, just when you need the water most." In the majority of cases the windmill is located within 50 feet of the house; nearly one-fourth of the houses have their mills within 25 feet. On the other hand, 1 in 8 of the homes without water inside is 100 feet or more away from its water supply. For the most part, however, the carrying of water is not such a task as in districts where it must be brought from a spring or creek.

As the pumping power is already provided, it is comparatively easy to pipe water into the house; in a typical instance, where running water had recently been put in, the installation cost only \$100. Nevertheless only 60 families, or less than 1 in 5, had water in the house when the last baby was born. But the idea of installing "water-works" is evidently spreading, for several families had made this improvement within the year; and more were planning to do so in the near future, especially when building new houses. One mother expressed a common sentiment when she said, "We sure will have water when we are settled on a place to stay."

When people have water in the house they usually have running water from a tank filled by the windmill. This tank is sometimes in the house and sometimes on the windmill frame. But some builders have been so misguided as to arrange the tank *under* the house so that the water must be lifted into the kitchen by a hand pump. A number of families have piped water available in the summer, but the tanks or pipes are not protected from freezing in the winter.

One in four of the landowning fathers had water in his house, but only 1 in 10 of the renters.

Other conveniences.

Sinks for the disposal of waste water are as scarce as inside water, and even more markedly confined to the homes of landowners. Eighteen families had bath tubs—most, but not all, with running water; only 2 had water-closets.

Although conveniences which are taken as a matter of course in the ordinary city home—sinks, running water, set tubs, and lights—are scarce, the housewives are well supplied with other labor-saving devices such as oil stoves, sewing machines, washers, and mechanical churns. Nearly every one has a sewing machine. Four in every 5 women have washing machines, and 1 in every 8 has a washing machine run by an engine.

Boarding hired men.

By far the most serious aspect of the housework problem in this community is the necessity of boarding hired men. About one-third

(114) of the families visited kept a regular hired man for whom the housewife must provide for at least six months through the summer and fall. During their last pregnancy 263 mothers had occasional farm laborers to board. These extra hands appear for the busy seasons, almost always for harvest and thrashing, often also for plowing and sowing in the fall, and sometimes for the spring work.

One mitigating feature of the situation is that it is not the custom in this district for the housewife to do the washing for the hired men, particularly not for men who are employed for only a short time. Even men employed for the season are usually expected to do their own laundry work.

Harvest and thrashing crews.

Of all the "hands" the harvest crew is the greatest burden. Wheat harvest comes in the latter part of June and the early part of July and ordinarily lasts for from two to three weeks, occasionally for a month; and life is strenuous during that time. The smallest number of men who can handle the reaping is 3—called a half crew—which means 2 men besides the head of the family, unless there are grown sons or brothers in the household. A standard crew for work with a header—the almost universally used type of reaping machine—is 6 or 7 men, and this is the number most commonly employed; but the larger farms not infrequently need a double crew of 12 to 15 men. To have such a crew to cook for, even with the help of a hired girl, for about three weeks in the middle of summer is plainly no light task and is especially trying when it comes near the time of confinement. The women recount that during harvest they have to begin work about 4 a. m. and get through about 10 p. m., with possibly a short rest after dinner. The work is acknowledged to be so hard that hired girls regularly get more than their standard wages at this time—sometimes as much as \$2 a day.

The housework at thrashing time is not regarded as so arduous, even when a larger number of men (thrashing crews usually number 12 to 15 men) has to be provided for, because thrashing ordinarily lasts only a few days, and "you can get a lot of things cooked up in advance to last that long." Furthermore, many of the thrashing outfits feed their own men—the "machine men"—from a portable kitchen called the "cook shack," an arrangement which relieves the housewife of all responsibility so far as these men are concerned. Then all she has to provide for, in addition to her family, are the few men who haul the grain; and when, as is often the case, the haulers are neighbors who are "changing work," she has to give them only their dinners. Obviously the cook shack is a great boon to the housewife. The reason it is not always employed is that

under the standard scale of charges it constitutes a large addition to the farmer's thrashing expense; he can save a good deal of money by getting an outfit without a cook shack and providing for the men himself.

How the situation works out for a representative group of farm mothers is shown in the following illustrations:

On a farm of 160 acres, where the family consisted of the father, mother, and two children of 3 and 5 years, the baby was born in June, at the beginning of the harvest season. For a week before her confinement the mother had to house and board 4 men; and when the actual harvesting began, 10 days after the baby was born, she had 6 men to board for 8 days. Six weeks later came the thrashing, with 5 men for 3 days. This extra burden of work came at a time when the mother most needed her strength, at the end of a trying pregnancy which was complicated by swollen feet, varicose veins, and dizzy spells. While the confinement was normal, the recovery was slow. Although for 2 weeks before and 3 weeks after the baby was born she had a hired girl who did most of the work, and although her sister came to help during thrashing, nevertheless the mother attributes her slow recovery to the fact that she had to work "harder than she would have liked" after the baby was born.

The mother on another 160-acre farm had 4 children, the eldest 8 years old. She was miserable with pain and nausea all through the latter months of her fifth pregnancy, and was weak for more than a month afterwards. Harvest began the day before the baby was born. The two "hands" stayed 15 days; but they got part of their meals at a neighbor's, and the mother did not have to cook for them herself because she had a hired girl who did all the work for 2 weeks before and 5 weeks after the baby came. At thrashing time the mother had only two meals to give.

In another case, on a farm of 640 acres, the mother, who was badly bloated and troubled with headaches and vertigo during the last month of pregnancy, had to board during that month 3 carpenters and 6 men for the barley harvest, in addition to the 1 man employed for the season. Though she had a hired girl for the last 2 or 3 weeks, she helped with the cooking up to the last day and had the care of her three small children. The baby was born the very day the wheat harvest began; that day there were 15 hired men on the place. Harvest lasted 12 days; the next day the hired girl left; and the day after that came the thrashing, with 6 men to provide for. It is not surprising that the mother reported that she recovered her strength slowly.

The baby on a 450-acre farm—the youngest of 5 children under 9—was born in the winter. The mother had had a stillborn child less than a year before, and she vomited badly all through this last pregnancy. Every year she has 6 men for harvest in July for about 3 weeks, and 6 grain haulers in October for about 8 days; her husband keeps 1 hired man all the time and usually 2 all summer. The mother has had no help for the past three seasons.

The family on a 520-acre farm consisted of 9 people; 2 boys were grown, but the oldest girl was only 12, and there were 3 children under 5. The last baby was born in the fall, 3 months after harvest; the mother was troubled during pregnancy with pains and dizziness. Harvest brought 2 hired men for 10 days early in July; later in the month thrashing brought 3 men for 2 days. The mother had no help with the housework except her daughter.

On a farm of 200 acres where the baby was born early in the fall the mother had 3 harvesters to board for 2 weeks in June; at thrashing in August she had 4 men for dinner 2 days only. She had no help either time and she reported that she felt "extra well" throughout the summer. In addition to her work for the men she had two little children, 2 and 3 years old, to care for.

On a 160-acre farm the mother, whose baby was born late in the fall, boarded 6 men for 2 weeks at harvest beginning the last of June; at thrashing in August she boarded 5 men for 2 days. She always has to be careful of her strength during the early months of pregnancy, but fortunately was in excellent health during the busy season. Her daughter of 18 helps her with the housework; she has only one other child besides the baby, but she is caring for two of her sister's children.

On a 380-acre farm the baby was born in the latter part of May, the sixth child in a family whose eldest was only 8 years old. The mother was in excellent health through her pregnancy and recovered from childbirth so well—"felt better than ever before"—that she kept her hired girl only two weeks, after which she did all her regular work, including milking, gardening, and the care of chickens. Harvest came when the baby was 3 weeks old, bringing 5 "hands" for 2 weeks; at thrashing, immediately after harvest, 2 haulers were boarded for 2 days. The mother had no help with the housework during this time, but she did no milking or gardening through the harvest period; as far as possible she had "got her work done up ahead" the first week she was up from bed.

The mother on a farm of 240 acres had three children, the oldest 7, before her last baby was born. This birth occurred in the winter, which made the trying latter months of pregnancy—the mother suffers from swollen feet and varicose veins—easier than if it had come in the summer. In the previous summer she boarded 6 men at harvest for 6 weeks; and almost immediately after that she had the "whole crew" of 12 thrashers to cook for for 3 or 4 days. From the time the baby was 3 weeks old she had 1 hired man to board; 6 harvesters again in the summer, but for only 2 weeks; and 12 thrashers in August. She had help each summer, however.

Another mother, whose baby was born in the fall on a 640-acre farm, had to board 4 harvest hands in July and 12 thrashers for 6 days in August in both the preceding and following summers; she had no outside help with the housework, but her 2 grown daughters do much of the work. She was in good health throughout this time except for varicose veins during pregnancy. Another baby was born

the second spring, and the varicose veins were "worse than ever." That year the mother had the usual 4 harvesters for 2 weeks when the baby was 10 weeks old; but the thrashers brought a cook shack, so that she had only 3 or 4 grain haulers to provide for. The father keeps 1 hired man nearly all the time. This mother has 11 children, of whom 5 were less than 10 years old when the last baby was born.

The baby on one 560-acre farm was born in the winter. The mother was troubled with vomiting throughout pregnancy. One hired man was employed steadily that year. The six harvesters stayed until the end of July, but the mother had help then. For the last three months before the baby was born she had a hired girl all the time and did no work except cooking and sewing. The cooking in itself was no light task during this period, as her husband thrashed three different times that fall, the last time only a month before the baby was born; and each time the mother cooked for the whole crew of 12 to 14 men. Ever since this confinement—her first—she has been almost disabled with uterine trouble. The following summer there was 1 hired man before harvest; 6 harvesters for 2 weeks; and only 3 or 4 haulers for 3 days at thrashing, because the thrashers brought a cook shack. The mother could not get a hired girl that year, but her sister helped her through harvest and thrashing.

A mother who lived on a 640-acre farm had four little children before this baby came, of whom the oldest—twins—were only 4. The baby was born in the winter, five months after harvest time, and the mother had good health all through her pregnancy except in the first two months. At harvest that summer she had a hired girl to cook for the 7 men, but no help at thrashing in September, when she had to do the cooking for 15 men for 3 days. One man is employed all the time. The year following the baby's birth the mother cooked for 3 harvesters and later for 3 haulers at thrashing, and then for 2 hired men until November; she could not get a girl at all that year, although the 2-year-old was sick at harvest time and the mother was barely able to struggle through with the work. This family plans to give up farming, partly because the harvest work is too hard for the mother and they have found it almost impossible to get household help.

Four-fifths (272) of all the farm mothers worked for harvest crews, of at least 3 men, either before or after confinement; 43 of them within 1 month of confinement, 81 within 2 months, and 124 within 3 months. That serious harm may result from the strain of such work is illustrated by the experience of two mothers during former pregnancies, in each instance a little over a year before the last baby was born. Each had a miscarriage that summer, one at 2 months and one at 5, which she attributed to overwork at harvest time. Both of these women evidently were hard workers. One of them had a gang of carpenters in addition to the farm hands to provide for the summer of the miscarriage, and besides her own work she did the washing and baking for a bachelor neighbor.

It is markedly true of this country that prosperity comes hard on the farmer's wife, because prosperity here means practically always a larger farm and more wheat, and therefore more men to board for a longer time. One woman expressed the situation succinctly by saying: "We have so many men because we farm so much land." She had a double crew of 15 harvesters to board both the year her baby was born and the year after, and 10 thrashers immediately after harvest; also 2 men through the rest of the summer and fall, and a gang of carpenters for a good part of both summers. Though she had a hired girl during harvest and thrashing, her work was nevertheless much heavier than that of the wife on a quarter-section (160-acre) farm whose only "hands" were a single crew of harvesters for a couple of weeks and a few haulers for two or three days. It also happened that in her case the difficulties of the situation were aggravated by an uncomfortable pregnancy, with much vomiting, and a difficult instrumental delivery—the birth occurring two weeks after thrashing—resulting in injuries which troubled her for a long time afterwards.

Another mother, whose husband farms a section and a half (960 acres), had a crew of 17 men on the place for three months the summer her baby was born and 1 or 2 men all the time. A third, on another 960-acre farm, had 4 men for a week, then 12 men for six weeks (finishing one week before her baby was born), and after that from 1 to 4 men for two months more until the next crop was sown. Each of these women had a hired girl through the summer.

Mothers' work for harvest crews is not only heavier on the larger farms but also falls to the lot of a larger proportion of the mothers. Where the father farmed less than half a section 72 per cent of the mothers had this work to do either before or after confinement; on farms of from one-half to three-quarters of a section the percentage of mothers having such work was 85; and on farms of over three-quarters of a section 87. This relation holds true of all work for farm hands; where the farm was smaller than one-half section 79 per cent of the mothers had to carry this burden during pregnancy; on the medium-sized farms, one-half to three-quarters of a section, 90 per cent; and on the larger farms (over 480 acres) 95.5 per cent of the mothers had hired men to work for.

Renters' wives have many inconveniences to bear, but they fare a little better than owners' wives when it comes to working for the hired men; 84 per cent of the former boarded some hired men during pregnancy and 92.4 per cent of the latter. Farm laborers' wives, of course, usually escape this kind of work, but sometimes they have to board some of the employer's hands.

Summer work is likely to fall heavily upon the wife of the man who owns and runs a thrasher. There were 7 of them among the

mothers included in the survey. Among these 2 ran the cook shack for the husband's crew for about 2 months; 2 did the husband's farm chores for 2 or 3 months while he was away with the thrasher; 1 had the crew to feed at the house most of the time for 2 months; and another had the crew at the house over Sundays all through the thrashing season.

Dairy work.

Dairying is a minor factor in agriculture in this part of Kansas; most farmers keep a few cows and many sell some butter or cream, but very few make any large part of their income from this source. Though half of the women visited did some churning, the large majority of these made butter only for their own use. Neither milking nor running the separator is customarily regarded as women's work, and a goodly number of the men even do the churning; in most families the mother does the milking only when the men are away or particularly busy, just as she would help with their other chores at such times. As the heaviest milk production comes in the winter while there is wheat pasture for the cattle, and as the men are least busy at this time, the situation works out very conveniently for the women.

Poultry raising.

The most common outdoor work done by the women is poultry raising. Almost every farm has its flocks of chickens and turkeys. Eight out of every 10 women visited kept chickens; and most of them raised at least 200 a year, while flocks of 400 or more are not uncommon. Most of the mothers do not regard the work of caring for the chickens as onerous, for in this climate chickens seem to thrive with very little care except in the spring, and therefore do not aggravate the summer rush.

Gardening.

Less than half of the mothers reported having done gardening during the period covered by the survey. Many had no garden (it is a discouraging task to try to raise vegetables in this climate), and in other families some one else—husband, children, or grandmother—took care of the garden. The men as a rule are helpful about doing the harder part of the work, such as preparing the ground, and often the cultivating also.

Other farm work.

Other farm chores—feeding the stock, etc.—rarely fall to the lot of the mother of the family; only 13 women reported doing this kind of work. And field work is even more unusual, only 7 mothers having helped in the fields during the last pregnancy or the year

following. One woman expressed the general standard when she said: "I had rather do outside work than housework, but I won't do both." In this community few women would think of neglecting their housework in order to help in the fields.

Farm work during girlhood.

• The situation is very different when one inquires as to the work which these same mothers did when they were girls. Ninety per cent of them lived in the country for at least two years of their girlhood (after they were 10 years old); and of these, four-fifths did more or less farm work. About one-third of the country girls did chores only—milking, gardening, care of chickens, feeding stock—while nearly half of them, in addition to their chores, did some work in the fields. For the girls raised in western Kansas this field work usually consisted of driving teams or herding cattle; but the list includes women who as girls did many other kinds of work in other places.

INFANT WELFARE.

Infant mortality rate.

The term "infant mortality rate" is used in the Children's Bureau studies to mean the number of children out of each 1,000 born alive within a given period who die before they are 1 year old.

In the group of 349 live-born children included in the survey, 175 were born at least a year before the agent's visit; and of these 7 had died before reaching their first birthday, giving an infant mortality rate of 40 per 1,000, or 1 death for every 25 births. For the other 174 born within the year preceding the visit no definite rate can be computed, because some of those who were still alive when they were visited may have died afterwards before they were a year old. There were 8 known deaths among this group, so that the infant mortality rate was at least 46 per 1,000. According to the death records of the county, no others of these children died up to the close of 1916, when all of them were at least 3 months old and had therefore passed the age when most infant deaths occur. Hence it seems probable that the actual rate for this group would not be a great deal higher than this figure.

An infant mortality rate of 40 per 1,000 is the lowest found in any of the Children's Bureau studies and less than half of the lowest rate found in any of the cities studied; the rate found in the same way for selected country townships in Wisconsin was 54 per 1,000. It must be remembered that the figures upon which this rate is based are so small that one or two deaths more or less—which might easily have happened without any real change in conditions—would make a considerable difference in the rate. Still it is improbable that chance variation would bring the rate much above 50.

The mothers of these babies had had altogether 1,193 live-born children. Excluding the 174 who were born within a year of the date of visit, there remain 1,019 children in these families for whom the infant mortality rate can be computed. Among these children 56 died before they were a year old, which gives an infant mortality rate of 55 per 1,000, or a little over 1 in 20. Evidently, then, the low rate for the survey period is not sporadic; the causes which produce a low rate among the babies in these country families have been in operation throughout the family history.

It is encouraging that in a prosperous, intelligent, farming community the infant mortality rate can be brought so low as this. Nevertheless, the existing rate should not be regarded with complacency, for, as Sir Arthur Newsholme says, "If babies were well born and well cared for, their mortality would be negligible." In other words, there is no inherent reason why *any* babies should die in a community which has all the advantages possessed by this county—country life, healthful climate, high standards of living, a high level of intelligence about matters of health, and means wherewith to provide for its mothers and babies.

Causes of death.

Of the 15 deaths under 1 year of age which occurred in the group of babies for whom schedules were secured, 2 occurred under 1 day, 4 under 2 weeks, and 6 under 1 month. Five of the deaths were due to causes peculiar to early infancy, 5 to diarrhea and enteritis, 3 to respiratory diseases (1 of these was bronchitis following whooping cough), 1 to measles, and 1 to marasmus.

Feeding customs.

Practically all the babies in this study were breast fed at least for a few days. Of the 349 live-born babies 2 died before they were fed at all; only 2 were fed from the bottle from the beginning; and only 7 were weaned before the middle of the first month. On the other hand, 311 or 92 per cent of the 340 babies for whom the record covers the first month of life were exclusively breast fed through the greater part of that month, and another 20 or 6 per cent were partly breast fed. The proportion of exclusively breast-fed babies then drops month by month to 71 per cent at 5 months and to 61 per cent at 6 months. After that the percentage naturally falls off more rapidly, but 23 per cent or nearly one-fourth of the babies were still exclusively breast fed during the ninth month, and a small number (8 per cent) had no other food than breast milk until after they were a year old.

Breast feeding in combination with other food is continued longer even than these figures would indicate. At the end of the ninth month only 19 per cent of the babies were weaned, i. e., wholly taken

off the breast, and at the end of 12 months only 30 per cent or less than one-third. In fact, for the majority breast feeding continues well into the second year; at the end of 15 months 45 per cent or nearly one-half were not yet weaned; and at the end of 18 months 24 per cent or about one-fourth. Medical authorities agree that this custom of late weaning is not to be recommended. Though less dangerous than the opposite practice of too early weaning, nevertheless it is not advantageous either for the mother or for the baby. In most cases the baby should be weaned by the end of the first year.

If the feeding history of these country babies in Kansas is compared with that of the city babies of native mothers in Johnstown, Pa., and Manchester, N. H.—the first two cities where this study was made by the Children's Bureau—and in Akron, Ohio, the larger of the cities of the Middle West, we find that exclusive breast feeding is much more common through the first nine months in this Kansas county than in any of these cities (with the exception of the last three months in Akron), and, conversely, that artificial feeding is even more markedly absent. Since breast feeding, especially in the early months, is proved and acknowledged to be an important factor in protecting a baby's chance of life, this fact of the unusual prevalence of breast feeding probably accounts, in part at least, for the low death rate among this group of country babies.

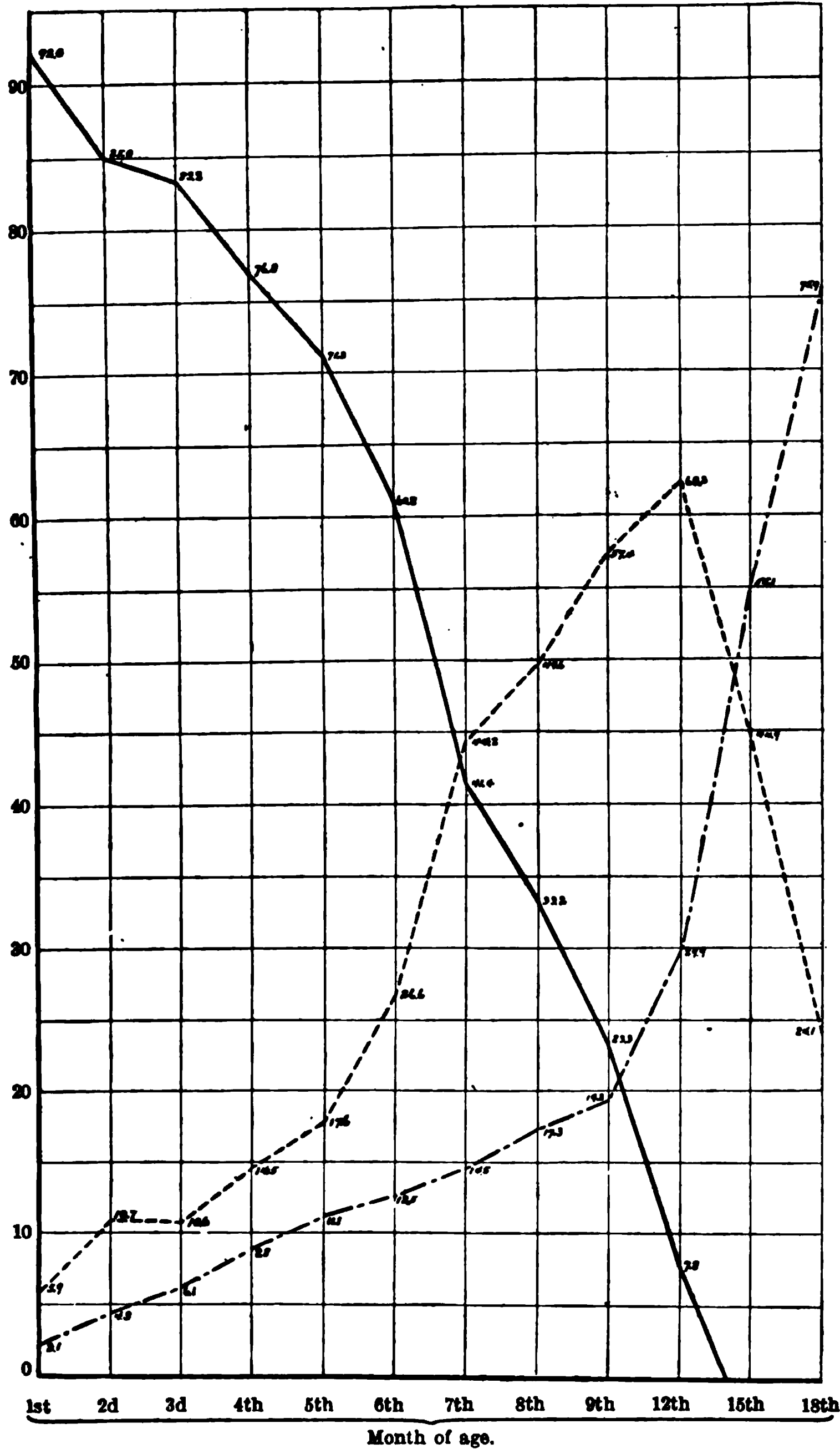
TABLE V.—*Breast and artificial feeding, by month and locality.*

Locality.	Percentage of infants who were exclusively breast fed.				Percentage of infants who were artificially fed.			
	During first month.	During third month.	During sixth month.	During ninth month.	During first month.	During third month.	During sixth month.	During ninth month.
County in Kansas....	92.0	83.2	60.8	23.3	2.1	6.1	12.5	19.3
Johnstown, Pa. ¹.....	.....	66.9	41.1	11.8	.....	20.3	26.1	34.1
Manchester, N. H. ¹	81.7	60.9	36.3	17.1	15.4	32.5	47.4	55.1
Akron, Ohio ¹	87.9	73.3	54.5	27.7	8.1	18.5	26.9	32.3

¹ The percentages for Johnstown, Manchester, and Akron are given only for the babies of native-born mothers, because in the Kansas county practically all the mothers were native.

A mother may be obliged for some reason to resort to supplementary feeding or even to wean her baby altogether; but necessity does not excuse the giving of solid food in the early months, as is often done by ill-advised mothers. The mothers of this community are on the whole careful in such matters. Only 10 babies (out of 310 whose feeding records for three months were obtained) were given any solid food before they were 3 months old, including as solid food gravy, or milk thickened with flour, crackers, etc. Only 59 (out of 263) began to eat solid food before they were 6 months old. And 79 children (out of 202) had no solid food until after they were 9 months old.

PERCENTAGES OF ALL BABIES RECEIVING DIFFERENT KINDS OF FEEDING, BY MONTH OF AGE.
PER CENT.



————— Breast feeding.
----- Mixed feeding.
----- Artificial feeding.

The use of proprietary foods and condensed milk for babies is less common than in many localities. Twenty-four of the babies of the survey were given condensed milk; 14, malted milk; and 26, other prepared foods. Cows' milk, either whole or modified but without any proprietary preparation, was used as a regular feeding for 51 babies at some time before they began to take solid food. A large number, however, had no supplementary feeding—the breast milk being ample—until the mother considered that it was time to allow the baby to eat solid food, which, as we have seen, in most cases was not very early. Some of the mothers in this county unfortunately exercise worse judgment about what to give the baby than about when to begin artificial feeding. Too many youngsters take “tastes” of whatever the family has, or whatever they want, from the beginning. On the other hand, many mothers are careful about this also, beginning with a restricted diet of milk and cereals, bread, or crackers, and only gradually extending the list of what the baby may eat.

A striking illustration of the dangers of artificial feeding, and also of the close connection between maternal and infant welfare, is given by the history of the baby whose mother died of puerperal septicemia. He “did finely” the first 10 days while his mother was nursing him but never thrived on artificial food. All sorts of feeding—except modified milk—were tried by the two women who took care of him almost constantly under the advice of one or another doctor; but nothing agreed. He “just wasted away”; and when the agent saw him he was “a pitiful little skeleton, with hardly strength enough to cry.” Consequently it was no surprise to learn that he died the following day from marasmus.

Birth registration.

Kansas has a satisfactory vital-statistics law which requires (sec. 10, ch. 296, Session Laws 1911): “That it shall be the duty of the attending physician or midwife to file a certificate of birth, properly and completely filled out, giving all the particulars required by this act, * * * with the local registrar of the district in which the birth occurs, within 10 days after the date of birth, and if there be no attending physician or midwife, then it shall be the duty of the father or mother of the child, * * * to notify the local registrar within 10 days after the birth of the fact that such birth occurred * * *.”

As has been explained, a canvass was made in the country districts to find babies whose births had not been registered. The list of names so found was afterwards checked by the State registrar.

In this way 35¹ unregistered births were discovered. Fourteen of the 350 children born in the county were born in town and all of these 14 were registered; but of the 336 births which occurred out in the country, these 35 or 10.4 per cent were unregistered. If this county may be taken as a fair sample of the completeness of birth registration in Kansas, only a slight improvement would be necessary to bring the State up to the standard required for admission to the birth-registration area, viz, that at least 90 per cent of all births shall be registered.

Twenty-six of the unregistered births were attended by physicians, 5 by midwives, and 4 by other people. As midwifery in this county is on such a nonprofessional basis, it is fair to say that the duty of reporting all these 9 births where there was no physician devolved upon the parents. Six of the 10 physicians who did the bulk of the obstetrical work in this district reported all their births; and 3 of the others were responsible for half of all the failures to register.

No record was secured as to promptness of registration except for the 19 births which occurred in September, 1916. All of these were registered; but 8 of the 19 were registered more than 10 days after the birth took place, and therefore the requirement of the law on this point was not fulfilled.

Township, village, or city clerks act as local registrars in Kansas and are required not only to secure complete registration from their districts but also to keep local records of all births and deaths. According to the provision of the law (sec. 3, cit.), which authorizes the State board of health to establish registration districts, this county is divided into eight districts of varying size. Five consist of only one township, while the largest contains five townships. Apparently the purpose is so to arrange the districts, by grouping the townships around the larger towns, that the registration office shall be as convenient as feasible to the local physicians. But this arrangement must interfere, where the districts are large, with the registrar's ability to keep track of events through his own acquaintance. The problem of registration is further complicated by the fact that in some cases births are not registered in the districts where they occurred but in the physicians' home towns. This practice is unnecessarily confusing to the registrar of the district in which the birth did occur, if he is making an effort to carry out his duties and see that the births in his territory are registered.

¹ Including one which was registered several months after the canvass was made, possibly, therefore, as a result of the canvass; but excluding one which had been registered in the local office but the certificate not forwarded to the State registrar.

SUMMARY AND CONCLUSIONS.

The findings of this survey of the rural area of one county have a meaning not only for the county itself but also, because this county is a typical one, for large tracts of western farming country. The circumstances affecting the care of mothers in childbirth here have therefore a wide significance. The fact that every year in the United States thousands of mothers die needlessly from childbirth compels attention to this subject. The favorable conditions described in this report suggest measures to be taken by other communities interested in the prevention of suffering and death of mothers and babies. The less favorable conditions reported will doubtless be recognized as typical of large numbers of rural districts throughout the country.

The farming population of this county is almost entirely of native birth and predominantly of native parentage. The general standard of living and of education and intelligence is high, especially among the two-thirds of the population who own land. For several years the all-important wheat crop has been satisfactory and prices high, so that the community is in a prosperous financial condition. Consequently most families are not debarred by poverty from obtaining such care for mother and baby as seems to them necessary.

The infant mortality rate of the group of babies studied in this district is low—40 per 1,000 births. Though this is only half of the lowest rate found by the Children's Bureau in any of the cities it has studied, nevertheless the community should not rest satisfied with this record but should set as its aim the saving of all its babies. Nearly all the babies seen were strikingly sturdy, active, and apparently well developed. It is significant that these indications of good health occur in a community where only 1 baby in 5 is weaned before he is 9 months old, and where the mothers as a rule are careful of the feeding of their babies and are interested in learning all they can about the best methods of infant care.

The interest shown by the mothers of the county in having their babies examined at the "Baby Days" indicates a field for further endeavor. Such examinations might well be held by physicians at regular intervals at accessible centers throughout the county. A county public-health nurse could assist the physicians at the "Baby Days" or baby-health conferences. She could also establish headquarters at the county seat and at accessible substations throughout the county in smaller towns and rural schools, where she could weigh babies and talk with mothers who wish her advice. How to keep the baby

well through the hot summer; what to do before the doctor comes, in an emergency such as croup or convulsions; how to nurse a sick child or a mother and newborn baby at home—these are all questions about which women are anxious to learn all they can. The simple equipment necessary for these meetings and baby-health conferences throughout the county—scales for weighing the babies, exhibit material, and apparatus for giving demonstrations—could easily be moved from one center to another if an automobile were available for the nurse's transportation.

The study shows that approximately 1 in 10 of the babies in this county born in the open country will be unable to get a birth certificate if one is needed later in life. Such a percentage is a fairly low one, but it shows that a still greater appreciation of the importance of birth registration on the part of parents and physicians is necessary. No community should be content until every birth is registered.

Except at harvest the ordinary run of work which the mothers have to do is not overhard. Although such conveniences as running water, sinks, and indoor toilets—which a city woman considers indispensable—are too often lacking, nevertheless mechanical labor-saving devices are fairly common. Few mothers do any field work or any farm chores except poultry raising and gardening. But at wheat-harvest time, and often at thrashing, there comes an almost overwhelming rush of work because of the necessity of boarding the crews. This is always a great burden and may be a serious matter if it happens at a time when the mother's strength should be spared.

Trained nursing care at confinement is seldom obtained. Only a few of the mothers went to a hospital at this time or had a trained nurse together with a helper for the housework at home. Even the so-called "experienced" nurses are rare; most of the mothers visited depended upon relatives, neighbors, or hired girls for their nursing care.

There is an evident need in this community for trained attendants—competent women who have had some training and experience in home care of the sick, and who can do the necessary housework for the mothers and the nursing under the supervision of a trained nurse. In several communities it has already been proved that women can be found willing and anxious to do this work. Training courses have been established, and registries of properly qualified and supervised trained attendants are conducted in several cities and towns. The supervision of the work of these attendants by registered nurses is an essential part of the plan. Visiting nurses are acting in this capacity in several communities. A nurse, or a group of nurses, employed by this county could well include this work of supervision in their program.

The situation as to medical care in connection with childbirth is better than in other country districts studied by the Children's Bureau. Almost all the mothers were attended by a physician at confinement. Roads which are nearly always good made medical care accessible even in this country of widely scattered farms. The necessary cost of medical service is not prohibitive to the majority of families. Hospitals, accessible to all parts of the county by means of the good roads, are available for complicated cases. The mother in the group of families studied who had to be delivered by Cæsarean section might have been lost, and her baby also might have died, if she had lived in a rural district where, either because of distance or because of impassable roads, no good hospital was within reach.

The question of the prenatal care obtained by this group of mothers is important. Only of late and to a limited degree has it been realized that expert supervision is necessary for every woman during pregnancy, if complications of this period and of confinement are to be prevented or cured. Such supervision is essential for the reduction of the maternal mortality rate of any community. That physicians should realize these facts is not enough; women and their husbands must realize them also. Otherwise women will not consult their physicians early and regularly during pregnancy, nor will their husbands be willing to pay for this added service. In this rural county one-third of the mothers secured some prenatal care from physicians. In few cases was this care adequate or even fairly adequate; nevertheless, a beginning has evidently been made toward the realization that medical supervision during pregnancy is necessary. During the last few years it has been proved that trained nursing service is invaluable in supplementing medical supervision during pregnancy. If this is true in the city, where it is comparatively easy to consult a physician, it is still more true in the country where the distance from the physician makes it more difficult to see him regularly. A nurse who has had special training and experience in prenatal work, and who is especially equipped to discern the danger signs of pregnancy, can be of great help to the prospective mother in the country and to her physician. She will advise the mother about daily details of her care of herself so that she can avoid much discomfort and disability; she will urge her to see her physician early for a thorough preliminary examination and later when necessary; she will urge her to send samples of urine regularly to be examined, or, if asked to do so, she will make examinations of the urine and report the results to the physician. Such prenatal work may be one of the most important phases of the duty of a county public-health nurse.

The fact that in more than one-third of the confinements the mother did not receive a visit from the physician after the day of the birth, and the fact that in another third she received only one visit, are evidence that the importance of after-care for the mother is also not realized.

The Children's Bureau in a recent publication¹ has suggested a plan for securing adequate medical and nursing care for mothers and babies in a rural county, which should include:

1. A rural nursing service, centering at the county seat, with nurses especially equipped to discern the danger signs of pregnancy. The establishment of such a service would undoubtedly be the most economical first step in creating the network of agencies which will assure proper care for both normal and abnormal cases. * * *

2. An accessible county center for maternal and infant welfare at which mothers may obtain simple information as to the proper care of themselves during pregnancy as well as of their babies.

3. A county maternity hospital, or beds in a general hospital, for the proper care of abnormal cases and for the care of normal cases when it is convenient for the women to leave their homes for confinement. Such a hospital necessarily would be accessible to all parts of the county.

4. Skilled attendance at confinement obtainable by each woman in the county.

In the county studied progress has evidently been made in securing certain of these suggested essentials for the care of mothers and babies. It will be evident that in this county and others of similar type the next step may well be the establishment of a nursing service for the rural parts of the county. The ways in which a nurse could be of help to the mothers of this district have been pointed out.

A number of public-health nurses in the United States are now employed by county boards of supervisors or boards of education. Their work is no longer an experiment; its value has been definitely proved. In certain counties the work was established at first through private subscriptions; enough money was raised in this way to support a nurse for a period of 6 to 12 months; after the value of the work had been demonstrated the county authorities appropriated money to continue it. This was in recognition of the fact that public-health nursing is not a charity but is a measure for health protection to which all the people of the community have a right. In one county in a Middle Western State a federation of women was formed which included all the organizations of women in the county—women's clubs, ladies' aid societies, and parent-teacher associations, as well as small neighborhood groups of rural women. Largely through the efforts of this federation a tax was levied by referendum vote and a

¹ *Maternal Mortality from All Conditions Connected with Childbirth in the United States and Certain Other Countries*, p. 27. U. S. Children's Bureau publication No. 19. 1917.

large sum of money provided for health work. Two nurses are now employed by this county.

In many counties the nursing service has been established through the employment of a nurse for the rural schools, and this method has proved very successful. In other counties the nurse has begun her work as a tuberculosis nurse; in others as an assistant to the county health officer. Whatever the beginning of the work, the nurse soon finds that the assistance which she can give to mothers in the care of themselves and of their babies is one of its most important developments.

In planning a rural nursing service two things are essential:

1. Every effort should be made to get the right nurse. The nurse employed should have had training in public-health or visiting nursing such as is given now in many training courses, and should also have practical experience. Nurses who have had hospital training only are not fitted to carry out public-health nursing successfully.

2. Ample provision must be made for transportation through the county.

In Kansas, county boards of commissioners have the authority to employ county nurses if they see fit. There is therefore no legal obstacle in the way of this measure for the promotion of the public welfare, and this county could in no way better demonstrate its progressiveness nor more effectively protect the health of its citizens than by providing such nursing service for the whole county.



U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

Child Labor in Warring Countries

A Brief Review of Foreign Reports

By

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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, July 3, 1917.

SIR: Immediately after the declaration of war by the United States the Children's Bureau began a review of such foreign official documents concerning child welfare as were available in this country in order that the experience of the belligerent nations might be placed at the disposal of all who are concerned with the protection of children in the United States. The present report, one of the units in this study, indicates that the countries whose standards of school attendance and protection from premature and exhausting employment are most nearly comparable with our own have maintained their standards without change during three years of war. Notable among them are New Zealand and certain Canadian Provinces and Australian States. The lengthening of hours, which has elsewhere been permitted as a war measure, has so seriously threatened the health and efficiency of the workers that the Governments of England, France, and Italy have restored in part their prewar standards. Quite as significant is the emphasis which has been placed on a reorganization of adolescent education in England and France as essential to the economic welfare of these countries after the war. It is hoped that this report will call attention to the growing concern in the warring countries for the welfare of children and the earnest efforts now being made in the midst of war to improve their condition, and that it will aid in showing not only the importance of maintaining here all the present industrial protection afforded to women and children but of carrying this protection forward notwithstanding war conditions.

The text of the report has been prepared by Miss Anna Rochester of the Children's Bureau. The research work has been done by several persons who have reviewed the material for the various countries, as follows: France, Miss Rochester; Germany, Miss Alice P. Gannett; Great Britain, Miss Louise Moore; Italy, Miss Mary D. Hopkins; Netherlands, Mrs. Karl de Haas and Mr. J. H. Muurling; Russia, Miss Marie D. Hourwich and Miss Anna Kalet. The Bulletin of the International Labor Office, which was the starting point of

the study, was reviewed by Miss Ella A. Merritt. Special acknowledgment should be made of the cordial cooperation of the officials of the Library of Congress in giving the bureau ready access to the valuable material which the Library has received. The bureau is indebted to the Federal Trade Commission for the use of certain British and French reports.

JULIA C. LATHROP, *Chief.*

Hon. WILLIAM B. WILSON,
Secretary of Labor.

CHILD LABOR IN WARRING COUNTRIES.

INTRODUCTION.

The first effect in every country of the European war was a period of widespread unemployment accompanied by tremendous pressure in the few industries which were immediately necessary for war supplies. The activities of labor exchanges were extended to facilitate the distribution of labor, and in many places labor restrictions were relaxed, since this was thought necessary to intensify production. Experience proved, however, that the relaxing of standards failed of its purpose. In England and France and more recently in Italy, after the redistribution of labor had been effected and an actual shortage of workers had replaced the earlier unemployment, definite steps were taken by the Governments to restore the provisions of the labor law, because they were found to be essential not only to the conservation of the available workers but to the quantity and the quality of their output.

On the other hand some countries resisted from the beginning of the war any such breaking down of the labor law and maintained, or even advanced, their labor restrictions. No special exemptions are reported from Hungary; and, with the exception of a slight lengthening of legal overtime in the Australian State of Victoria, school-attendance and child-labor laws have not been relaxed in any part of Canada, Australia, or New Zealand. They have been strengthened during the war in South Australia and in four Canadian Provinces. In England and France also official proposals have been made to reorganize and extend secondary education in ways which would directly affect the employment of children and raise the standard of their protection.

Switzerland toward the end of 1915 defined more exactly the exemptions which might be granted under the special war decree of 1914 and made it plain that night work by girls under 18 and boys under 16 would not be permitted and that the 14-year age limit for employment must be observed.

In other countries, where standards have been relaxed and no official action has been taken toward their restoration, protests and agitation by labor organizations, physicians, or social workers are reported. In Germany and in Austria-Hungary hours of labor have been shortened in certain specified industries for the sake of conserving mate-

rials. Thus, Germany in 1915 forbade night work in bakeries;¹ limited the work in spinning, weaving, and hosiery mills to 10 hours a day and 5 days a week;² prohibited the use of power machinery for cutting textiles; and permitted the use of power machinery for sewing, buttonholing, etc., only 30 hours a week.³ Hungary has forbidden night work in bakeries.⁴ Austria has withdrawn the power to grant exemptions for overtime and night work in establishments using cotton, except on urgent orders for the army.⁵

In general the relaxing of labor standards during the war has fallen into three classes.⁶

First and most general is the lengthening of hours of work, including night work and Sunday work and more or less unlimited overtime. Some such exemptions have been reported from England, France, Italy, Germany, Austria (but not Hungary), Switzerland, Holland, and Russia. The Australian Province, Victoria, in 1914 lengthened slightly the amount of overtime permitted to women and girls, but Victoria's present limit for special overtime is shorter than that fixed in times of peace in the European countries.

Second is a lowering of the age requirement for children entering industry. In this Italy has made the most general provision, permitting boys of 12 whose fathers are soldiers to go to work without regard to the educational standard formerly required of all boys under 15 years of age. France in 1915 admitted children of 11 years and 6 months, instead of 12 years, to the July examination for primary certificate which would exempt from school attendance. In England local authorities in certain districts have been excusing children from the requirements of the school-attendance law for agriculture and other "suitable" employments. In Germany special exemptions from the age limit for child labor are provided for in the emergency law of August 4, 1914, but how generally they have been granted does not appear.

In the third place women and young persons have been employed in dangerous, injurious, or heavy work formerly prohibited by law. The war legislation in Germany and Russia, for example, specifically provided for the granting of permission to women and young persons to work underground in coal mines. The under secretary of arms and munitions in France authorized the employment of girls under 18 in Government powder plants, from which they had formerly been excluded. In addition women have been employed in some occupations in which men only were formerly engaged and for which

¹ *Soziale Praxis*, Sept. 9, 1915, p. 1176.

² *Bulletin of the International Labor Office*, Vol. X, p. 232; *Soziale Praxis*, Nov. 11, 1915, p. 139.

³ *Soziale Praxis*, Jan. 27, 1916, p. 401.

⁴ *Bulletin of the International Labor Office*, Vol. XV (German edition), No. 10, 1916, p. 291.

⁵ See p. 27.

⁶ This material does not include any discussion of wages or of the methods of settlement for industrial disputes.

little or no protection was provided by law. Again, in some cases new dangers have developed for which former laws made no specific provision.

Quite as important as the temporary granting of exemptions is the postponement of laws which had been passed before the war but had not yet become effective. Conspicuous examples are the Federal factory act in Switzerland which had been passed in June, 1914, and awaited the word of the Federal Council to supersede the former law;¹ the conventions of Berne regarding night work of young persons and hours of labor for women and the use of white phosphorus which had not taken effect in Italy when the war began;² and the decree limiting the hours of labor in iron and steel industries in Germany.³

In considering the labor standards of belligerent nations during the war, it should be remembered that these standards in European countries were in time of peace lower than those accepted by public opinion and by legislation in this country. It is significant, moreover, that the British colonies which have maintained or advanced their labor standards in war time have, alone among the belligerent nations, enforced in time of peace restrictions of hours for women and children which are fairly comparable with the standards of the Federal child-labor law and the laws affecting women in the more advanced States of this country.

The point which does stand out unmistakably from the foreign experience is the general realization that the labor standards achieved in time of peace are none too high to promote the efficiency of work, the intensity of output, and the general level of health which are absolutely essential to the nation's welfare in war time.

EXTENT OF THE PROBLEM.

The disorganization of industry and the exceptional labor conditions which have been permitted would have seriously affected the welfare of women and children even if there had been no increase in the number at work, since even before the war they were employed extensively in the European countries. But in addition new workers have everywhere been drawn into industry during the war.

In England and Wales in 1911 more than 4,800,000 women and girls were employed. This was about one-third (32.5 per cent) of the total female population 10 years of age and over.⁴ The number of children under 14 years of age reported at work was 146,417. Of these, 10,424 were employed in agriculture.⁵ There were 34,152

¹ Bulletin of the International Labor Office, Vol. IX, p. 269, and Vol. XI, p. 55. This law was not yet in effect on Dec. 6, 1915.

² *La Confederazione del Lavoro*, Milan, Apr. 16, 1915, p. 111.

³ *Soziale Praxis*, Nov. 11, 1915, p. 139.

⁴ Great Britain Board of Trade (Department of Labor Statistics), *Seventeenth Abstract of Labor Statistics of the United Kingdom*, pp. 292, 306.

⁵ *Ibid.*, p. 318.

half-timers, children under 14 who attended school part of the day and worked part of the day.¹ The whole number of boys and girls in Great Britain 10 years of age and less than 15 was 3,499,688.²

In France in 1911 more than seven and a half million women and girls were employed, 38.7 per cent of the total female population of all ages. Nearly three and a quarter million of them were in agriculture and over two and a half million in occupations classified as industry. Of the 3,292,502 children 10 to 14 years of age 657,425 were at work, and about half of these working children were in agriculture.³ For the same year it is reported that 336,040 boys and girls 286,578 under 18 years of age were employed in occupations subject to inspection by the ministry of labor; the total number of young people 12 to 18 years of age was just short of four million.⁴

The number of women and girls over 16 years of age at work in Germany in 1907 was about seven and one-half million, 37.9 per cent of the total number in the Empire. A little more than four millions of those employed were engaged in agriculture. Of the 2,441,976 boys and girls 14 but under 16 years of age, 60.1 per cent, or 1,468,982, were employed, including 666,673 agricultural workers. Of the 20,168,636 children under 14, 183,428 boys and 113,358 girls were employed; and 68.7 per cent of these working boys and 81.2 per cent of these working girls were in agriculture. In addition, 1,060,812 women 16 years of age and over and 188,571 girls below that age were employed as household servants.⁵

Even in Italy, where it is generally supposed that women are averse to industrial employment, the figures for 1911 show that out of a total of 13,680,201⁶ girls and women above 10 years of age, 1,402,362 were then employed in industry and nearly three millions were working in agriculture.⁷ Of the 1,861,727 boys 10 to 15 years of age, more than half were at work either in industry or in agriculture.⁷

In the United States there was a marked increase between 1900 and 1910 in the percentage of women employed, and the latter census reports that 23.4 per cent of the thirty-four and a half million women and girls over 10 years of age were at work. Of the five and one-half million boys 10 to 15 years of age in 1910 in this country 1,353,139 were at work.⁸

¹ Final Report of the Great Britain Departmental Committee on Juvenile Education in Relation to Employment after the war, p. 31.

² Great Britain Board of Trade (Department of Labor Statistics), Seventeenth Abstract of Labor Statistics of the United Kingdom, p. 292. The number of working children 14 years old is not shown, so the numbers of working children (under 14) and of all children 10 to 14 inclusive can not be compared.

³ Ministère du Travail et de la Prévoyance Sociale, Résultats statistiques du recensement général de la population effectué le 5 mars 1911, Tome I, Deuxième Partie, p. 89; Troisième Partie, pp. 11, 70, 71.

⁴ Ministère du Travail et de la Prévoyance Sociale, Annuaire statistique, 1912, p. 119.

⁵ Statistik des Deutschen Reichs, 1910, vol. 203, p. 2 ff.

⁶ Census of June 10, 1911.

⁷ Annuario Statistico Italiano, 2d series, Vol. IV, 1914, pp. 49, 54.

⁸ Thirteenth Census of the United States, 1910, Vol. IV, p. 70.

While these figures can not be used for a comparison of different countries because of variations in the bases of the statistics, they do unmistakably indicate a longer period of education for young people and a less general employment of women in industry in the United States than in Europe.

Few figures are available to show how many more women and children have been drawn into gainful employment during the war by the extraordinary demand for labor which is reported for certain occupations in every country. From France,¹ Germany,² and Italy³ come reports of a great increase in home work, with its customary evils of long hours and low wages, in connection with army contracts for clothing and other supplies; and home work almost invariably includes the employment of children.

In all European countries the demand for children and women in agricultural work has been very great. Furloughs from school for a limited period are permitted by the school-attendance laws in France and Holland. In Russia the movement for compulsory school attendance which was under way before the war has been seriously hampered and the attendance of children who have been enrolled is reported to be more irregular than usual because of work they have to do at home and in the fields.⁴ In England certain exemptions are permitted by law and others have been granted at the discretion of the authorities. The actual number of children engaged in agricultural work can not be estimated for any country.

An interesting side light on what agricultural employment of children may mean comes from Russia, where some 600 refugee children from 13 to 16 years of age were organized in colonies by an agency of the city council of Moscow for the double purpose of helping the peasants in their summer work in the fields and of saving the children from the harmful influences of the capital. On the basis of a medical examination the children were divided into two groups—those able to give help on farms to a great extent and those who needed rest and recuperation. The latter, making up 8 out of the 19 colonies, also worked; but it was arranged that they could only help in the household and do "light" field work such as turning hay and digging potatoes; they were not to work more than 7 hours a day.⁵

From the British board of education we learn that while ordinarily in Great Britain some 450,000 children pass out of the elementary schools annually at or about the age of 14 the number was increased

¹ See pp. 29, 30.

² *Soziale Praxis*, Nov. 26, 1914, p. 202.

³ *Il Lavoro* (Milan), July 31, 1915, pp. 203 ff, 221, 222.

⁴ *Russkaja Mysl*, October, 1914, Pt. II, pp. 92, 93. *Russkija Viedomosti*, Oct. 16 (29), 1915; Oct. 17 (30), 1915; Feb. 24 (Mar. 8), 1916; Feb. 26 (Mar. 10), 1916.

⁵ *Russkija Viedomosti*, May 14 (28), 1916, and July 30 (Aug. 12), 1916.

by approximately 10 per cent during the year 1915. These additional 45,000 children were practically all legally entitled to leave school. Further, since September, 1914, a very large number of children who were still of compulsory school-attendance ages have been excused by the local education authorities for full-time agricultural employment or (in a few cases) for suitable light employment in cities.¹ "Broadly speaking, it is probable that together these figures do not fully represent the total loss."² On the other hand, Mr. Herbert Fisher, president of the board of education, stated in the House of Commons in April, 1917, that with the greater prosperity of the working classes since the war the enrollment in secondary schools has increased.³

From various British sources come reports of high wages for boys in unskilled occupations and special complaint of the large increase of young boys in street trades. It is stated that the scarcity of boy labor has caused girls to enter occupations in which they have not formerly been employed, but the occupations are not specified. The Board of Trade Labor Gazette⁴ speaks also of the shifting of juvenile labor from one district to another in a way apparently unknown before the war. The number of women gainfully employed in Great Britain had increased by almost one-third between July, 1914, and January, 1917, according to reports from employers. And of the 1,072,000 women who were added to the number of wage earners during that period, all but 1,000 were said to be directly replacing men. About 147,000 of these new wage earners were in Government establishments and 270,000 in privately owned metal works. Just what proportion of these two groups are at work in munition plants is not stated. The clothing trades, which were distinctly women's occupations before the war, and the paper and printing trades report a small decrease in the number of women employed. It should be noted, however, that these figures do not include the displacement of women, estimated at about 300,000, from domestic service or from very small workshops in the dressmaking trade.⁵

Between July, 1914; and October, 1916, women railway employees had increased from 11,000 to 33,000 and women brewery workers from 8,000 to 18,000.⁶

Reports of increased employment of women in Germany are based on the returns of the sickness insurance funds, for in Germany practically all industrially employed women must be insured. On September 1, 1915, the number of women insured against sickness in the

¹ See p. 49.

² Great Britain Board of Education, Annual report for 1915 of the Chief Medical Officer of the Board of Education, p. 104.

³ Great Britain House of Commons Parliamentary Debates, vol. 92, No. 41, column 1887 (April 19, 1917).

⁴ February, 1917, p. 49.

⁵ Great Britain Board of Trade Labor Gazette, April, 1917, pp. 125, 126.

⁶ Ibid., October, 1916, p. 357.

sick insurance funds reporting to the imperial bureau of statistics exceeded by 600,000 the number insured on February 1, 1915. The increase was 120,000 for the city of Greater Berlin alone. In quoting these figures ¹ Ernst Francke refers also to an investigation of the metal industry in the Dusseldorf district before the war which found 913 women employed there; in December, 1914, the number was 6,928. He states further that in the spring of 1915 the mining establishments of Prussia engaged an additional group of 3,000 women and 8,000 children 14 to 16 years old. The women in the Prussian mines were employed in 1915 only above ground, but some of the children "because of the removal of part of the protective restrictions can also be employed underground. It is to be hoped that a growing care for health and safety in industry accompanies the increasing number of women and young persons employed." ² A news item from London ³ states that on July 1, 1916, no fewer than 3,827,640 women were at work in the metal trades in Germany.

That women's work in metal trades in Germany is not confined to the munition factories appears from such a statement as the following: ⁴

In wire factories, women are employed at wire spooling, at the wire-weaving machine, and at wire drawing. In so-called "pottery" foundries women work at the machine mold for cast-iron cooking pots. A smelter in Upper Silesia employs about 50 women in blast furnaces, 25 in coke ovens, and 60 in steel and rolling mills. These women are obliged to do Sunday and overtime work. Another smelter employs about 25 women at blast furnaces and about 20 at Martin furnaces and in the steel works. In still another a particularly strong woman is employed as stoker of a furnace. These are all occupations for which formerly only strong men were used. In other smelters women are employed in lighter work.

Various other references are found to women's employment in Germany in occupations which were formerly men's and for which it is said that new restrictions should be provided in order to protect the health of the women. Unfortunately few German publications have been received since the spring of 1916 and no other figures on the employment of women and children are available.

An exodus of German children from the usual blind-alley occupations is indicated by the difficulty of getting boys for odd jobs, messengers, errands, and other unskilled "nomad" work. "All young boys with any ambition now become apprentices in skilled trades because they are much needed and are paid very differently from peace-time rates; or else they become lathe workers in munition factories, or enter the postal service. Formerly the parents had to make sacrifices and pay for the instruction of the boy, but now he

¹ Preussische Jahrbücher, vol. 162, (1915), p. 388.

² Soziale Praxis, Nov. 4, 1915, p. 118.

³ Washington Post, June 10, 1917, p. 12.

⁴ Soziale Praxis, Aug. 12, 1915, p. 1069.

makes while an apprentice as much as the unskilled youthful worker used to make."¹

Even more incomplete are the figures available for France, Italy and Russia.² We learn from the *Bulletin du Ministère du Travail* for example, that in April, nearly 50,000 industrial establishments, not including State-owned munition works or railways, tramway-mines, and quarries, had replaced by other workers more than one-fifth of the wage earners who had been mobilized. These establishments had employed before the war one and three-quarter million workers of both sexes and all ages and of these approximately 420,000 men (24 per cent) had been called to the colors. In April, 1916, the places of some 87,800 had been filled, but how these new workers were distributed among men above military age, and women, boys, and girls does not appear. A marked increase of women workers on French railways is reported. For example, it is stated by the *Journal des Débats*³ that the percentage of women railway employees in France in November, 1916, was growing daily and had already risen to proportions varying from 1 in 10 to 1 in 6 on different lines.

From France come reports also of women's work in furnace industries.⁴ As early as August, 1915, the bulletin of the minister of labor stated that "Certain of the new occupations in which women are employed seem injurious to their health and under normal circumstances the question would arise whether the employment of women in these occupations should not be regulated."⁵

In July, 1916, the French Government ordered that all soldiers detailed to munition work must so far as possible be replaced by women,⁶ and even earlier it had been ordered that women should be employed instead of men in office work and house service at army headquarters.⁷ In September, 1916, the minister of munitions stated that 300,000 women had gone into the munition works, but he does not say how many of them were under 21 years of age.⁸

Similar orders were issued in Italy in circulars of August 23 and September 28, 1916, which stated that by October 31, 50 per cent of the men of military age in the munition works must be replaced by women and boys and that by December 31 the percentage must be brought up to 80. The second circular states that of the 355,000 wage earners employed at that time in 822 munition works only

¹ *Social Progress*, Oct. 28, 1915, p. 30.

² The American sources have not been reviewed.

³ *June*, 1916, pp. 188-190.

⁴ Quoted by *Christian Science Monitor*, Boston, Nov. 17, 1916.

⁵ *Riforme Economiche*, Dec. 15, 1916.

⁶ *Bulletin du Ministère du Travail et de la Prévoyance Sociale*, Aug. 1915, p. 182.

⁷ *Ibid.*, July-Aug., 1916, p. 132.

⁸ *Ibid.*, June, 1916, p. 109.

⁹ *Le Matin*, Paris, Sept. 26, 1916.

45,628, or 13 per cent, were women. By December 31, 1916, according to the report of the national committee for munitions published early in the current year, the number of women employed in war industries had risen to 90,000, as against 430,000 men, or to 18 per cent of the total number of employees as compared with 4 per cent in November, 1915. In some plants the percentage of women has risen to 90 and even 95. While emphasizing the remarkable rapidity of this increase, the report points out the necessity of a much more general displacement of men by women, discusses the growth of technical training schools for women munition workers, and expresses the expectation of a continually increasing response of Italian women to the needs of the war industries.¹ How far this expectation has been realized, material available in this country does not yet show.

As in France the employment of women in auxiliary army services in Italy has been encouraged. Clerical work, kitchen work, laundry work, general cleaning and other work in military hospitals, and clerical work in territorial offices are especially referred to.²

The only Italian figures received concerning the employment of boys during the war refer to munition works in Lombardy.³ They are based on reports from 660 factories employing about 100,000 workers in June, 1914, and 145,000 workers in June, 1916. The number and percentage of boys employed was small and showed little change; 1,297 boys under 21, or 1.28 per cent, were employed in 1914, and 2,076 boys under 21, or 1.42 per cent, in 1916. On the other hand the number of women and girls in these plants had more than tripled and the percentage of women and girls among all workers had risen from 4.77 per cent in 1914 to 9.97 per cent in June, 1916. This indication of the slight employment of boys in comparison with that of women and girls is borne out by the report of the national committee for munitions.⁴

It may be noted that the number of boys in comparison with women is very small in large and medium sized establishments; and greater on the other hand in unimportant ones.

The reasons for this distribution of juvenile workers in contrast with that of female employees are evidently to be sought in the fact that quantitatively and qualitatively the output of boys is less than that of women, so that while the boys may be usefully employed in establishments which carry on small secondary operations they are on the other hand less adapted to take part in the large, complex, and very fatiguing processes of plants of the first importance.

The economic factor doubtless also helps to determine the distribution; it is quite natural that the factories of limited range and productivity should prefer to utilize

¹ Comitato Nazionale per il Munizionamento, *Il Lavoro Femminile nella Industria di Guerra Italiana*, January, 1917, pp. 20, 21.

² *Corriere della Sera*, Milan, Jan. 15, 1917, and Feb. 17, 1917.

³ *Città di Milano Bollettino Municipale Mensile*, Jan. 31, 1917, pp. 28, 29.

⁴ Comitato Nazionale per il Munizionamento, *Il Lavoro Femminile nella Industria di Guerra Italiana*, January, 1917, p. 23.

makes while an apprentice as much as the unskilled youthful worker used to make."¹

Even more incomplete are the figures available for France, Italy, and Russia.² We learn from the *Bulletin du Ministère du Travail*³ for example, that in April, nearly 50,000 industrial establishments not including State-owned munition works or railways, tramway-mines, and quarries, had replaced by other workers more than one-fifth of the wage earners who had been mobilized. These establishments had employed before the war one and three-quarter million workers of both sexes and all ages and of these approximately 420,000 men (24 per cent) had been called to the colors. In April, 1916, the places of some 87,800 had been filled, but how these new workers were distributed among men above military age, and women, boys, and girls does not appear. A marked increase of women workers on French railways is reported. For example, it is stated by the *Journal des Débats*⁴ that the percentage of women railway employees in France in November, 1916, was growing daily and had already risen to proportions varying from 1 in 10 to 1 in 6 on different lines.

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¹ *Social Forces*, Oct. 28, 1915, p. 49.

² The available figures for Russia have not been received.

³ *June, 1916*, pp. 188-189.

⁴ Quoted in *Christian Science Monitor*, Boston, Nov. 17, 1916.

⁵ *Revue Française*, Dec. 15, 1915.

⁶ *Bulletin du Ministère du Travail et de la Prévoyance Sociale*, Aug. 1915, p. 182.

⁷ *Ibid.*, July-Aug., 1916, p. 112.

⁸ *Ibid.*, June, 1916, p. 100.

⁹ *Le Matin*, Paris, Sept. 24, 1916.

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The economic factor doubtless also helps to determine the distribution; it is quite natural that the factories of limited range and productivity should prefer to utilize

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³ *Città di Milano Bollettino Municipale Mensile*, Jan. 31, 1917, pp. 28, 29.

⁴ Comitato Nazionale per il Munizionamento, *Il Lavoro Femminile nella Industria di Guerra Italiana*, January, 1917, p. 23.

boys either on account of the low wages or because their employment exacts few hygienic safeguards and precautions.

The *Corriere della Sera* (Milan, Feb. 2, 1917) tells us that for the advantage of pupils working in munitions factories, the committee of Tuscan teachers has submitted various practical proposals to the Minister Ruffini. Among these is one to divide the school year into two periods, one of which should be reserved—from June to October—for those who have given service in the factories.

An article which appeared in the *Moscow Russkii Viedomosti* July 3 (16), 1915, gives a picture of the effect of war upon women's work in Russia.

Since the war the use of women's work in industries has largely increased, particularly the number of women working in metallurgical establishments which before the war did not employ women and even avoided them. At first women were employed only in the most unskilled occupations of a general character. But gradually their labor was tried in more skilled occupations at the bench and machines. The women passed the test. Moreover, the experiment showed that substitution of women for men had some economic advantages for the factories. As a result, women were employed not only from necessity but because of profits.

Women were taken on by various mechanical shops, including blacksmiths'. There were factories where no women were found a year ago and now they constitute 20 per cent of all the employees; and this percentage is growing rapidly. The highly paid man's labor is being replaced by the cheaper woman's labor. The changes are striking. The women employing servants began to complain of scarcity of help on account of the increased demands made by domestics. In the regions observed by the author the factories until now had been closed to women. The men were working and their wives taking care of the children; many workers' families had their children in day schools. However, there were many manufacturing districts where nearly the whole family would be at work. The same thing happened in villages where the amount of land owned by peasants was insufficient and required outside earnings. Men were working the whole year around, women often gave birth to children while at work, and children of tender age were also employed.

At present there is a necessity greater than ever before to use women's work. Their labor is now required by the State. The consequences are complex. If the women at present plow the fields where they never did so before, it does not mean that we have come nearer to the protection of women and motherhood, to the equality of the sexes. If the women at present work in slaughterhouses, blacksmith shops, carpenter shops, and other factories, it does not mean that we have solved the important questions of social legislation. On the contrary, it can be stated that in view of the increased demand for women's work the questions of social legislation become more urgent.

Other occupations in which Russian women have been largely employed during the war include various kinds of railroad work and work in inns and restaurants. The minister of ways of communication, Trepov, early in 1916, issued an order permitting an increase in the number of women employees on railroads for the period of the war up to 25 per cent of all employees. Their employment as conductors is especially referred to, and in the cities of Kiev and Odessa it is reported that classes were opened for training women as conductors.¹

¹ *Russkii Viedomosti*, Feb. 20, Mar. 12 and June 11, 20, 1916.

General references are found in Russian publications to the substitution of children for older workers but no data are available as to the industrial occupations in which they are most largely employed. Street trading by young children has increased and some as young as five years of age are said to be engaged in this work. A member of the city duma of Moscow, appealing to that body to help these children, stated:

The retail sale of newspapers is mostly in the hands of growing children. With the leaving of the adult workers for the front, their places were taken by growing boys and girls working on the streets from early morning till late at night.¹

In spite of her neutrality Netherlands has, of course, been deeply affected by the war. As industrial life has gradually adjusted itself to these war conditions and to the mobilization of the army, there has been on the one hand continued unemployment and on the other a slight increase in child and woman labor. This increase has been especially marked in certain industries. The proportion of women and girls among all wage earners in industrial establishments employing more than 25 persons rose from 20 per cent in May, 1914, to 22 per cent in May, 1916.² The number of young children 12 and 13 years of age who were at work had decreased in 1913 and again in 1914. The number rose again in 1915 but did not reach the total reported for 1912 or 1913.³ A census of all industries shows from 1914 to 1916 an increase of 3 per cent in the employment of boys under 17 years of age, of 16 per cent in the employment of girls under 17, and an increase of 12 per cent in the employment of women 17 years of age and over. The increase in the employment of men 17 years of age and over in the same period was only 2 per cent. In the clothing trades and the metal industry, including shipbuilding, these percentages of increase are much higher.⁴

The following sections give the details of legislation in foreign countries—first, the slight changes in the British dominions where standards have been maintained; second, the new plans for industrial education which will mark a distinct advance in France and Great Britain; and third, a record of the exemptions and the movements for restoring standards in these two countries and others.

MAINTAINING STANDARDS OF SCHOOL-ATTENDANCE AND CHILD-LABOR LAWS.

There has been no weakening of labor laws affecting women and children in New Zealand or in any Canadian Province, and Manitoba has during the war reduced the overtime permitted to women and girls. The only alteration in factory laws for women and children in

¹ *Russkila Vedomosti*, Nov. 6 (19), 1916.

² *Central Verslag der Arbeidsinspectie*, 1915, p. 311.

³ *Ibid.*, p. 40.

⁴ *Ibid.*, p. 310.

any Australian State¹ has been an increase in overtime permitted by law in Victoria, but the present limit in Victoria is shorter than that fixed by European laws before the war. The pressure of demand for labor in these British colonies may be guessed from the large number of men who have gone to the front. Canada has sent from civil to military life one-nineteenth of her total population, or 440,000 men from among 8,322,000 persons of both sexes and all ages;² in New Zealand, one-fourteenth of the population has enlisted, or 80,593 men from a total population of 1,160,000.³

MANITOBA. *Acts of the Legislature of the Province of Manitoba, 1916, First session*, p. 125 (6 Geo. 5, ch. 41, sec. 5), amending *Manitoba Revised Statutes, 1913*, c. 2, sec. 15 (b); also secs. 13 and 15 (c) (summarized).

Overtime allowed in special cases for women and young girls in factories is reduced so that working hours may never exceed 12 hours a day or 60 hours a week, instead of 12½ hours a day and 72½ hours a week, and overtime may now be permitted on only 36 days in the year. The working hours may not ordinarily exceed 9 per day and 54 per week.

VICTORIA. *Public General Statutes of Victoria, 1913 and 1914* (5 Geo. 5, No. 2558, sec. 1), amending *Public General Statutes of Victoria, 1911 and 1912*, p. 143 (3 Geo. 5, No. 2386, sec. 37) (summarized).

Overtime allowed in special cases to women and girls and to boys 14 and 15 years of age is increased so that working hours may amount to 57 hours a week during 8 weeks in the year instead of 51 hours a week, including overtime on 10 days in the year. The working hours may not ordinarily exceed 8 per day and 48 per week.

Compulsory school-attendance laws have been maintained during the war without a lowering of the required standards in Canada, Australia, and New Zealand. This is especially significant in New Zealand, Alberta, and the Australian States—South Australia, Western Australia, and Tasmania—where attendance is compulsory under specified ages throughout the entire school term except for children who have completed the elementary school course.

The standard of school-attendance laws has been raised since August 1, 1914, in Nova Scotia, Ontario, Saskatchewan, and South Australia, and Manitoba passed its first compulsory school-attendance law in March, 1916.

NOVA SCOTIA. *Statutes of Nova Scotia, 1914*, p. 85 (5 Geo. 5, ch. 4, sec. 7, 11) and *Revised Statutes, 1900*, Vol. I, p. 409, ch. 55, art. 6 (summarized).

Attendance is required for the entire term in all cities and towns instead of only 120 days a year.

¹ The Queen's and Statutes since 1914 have not been available.

² The *Times*, London, May 3, 1917, p. 3.

³ *Id.*, Apr. 17, 1917, p. 3.

ONTARIO. *Statutes of 1916*, p. 312 (6 Geo. 5, ch. 62, secs. 3, 4), and *Revised Statutes of Ontario, 1914, Vol. II*, p. 3414 ff (summarized).

The local education authority may require attendance of adolescents under 17 years of age who are exempt from attendance under the truancy act at day classes or night classes. Exceptions may be made if the adolescent has been granted special exemption by the board or committee of the school he would otherwise attend, or if he is sick or has a senior public school diploma.

SASKATCHEWAN. *Statutes of the Province of Saskatchewan, 1917*, p. 23 (7 Geo. 5, ch. 19, sec. 3), and *Statutes of Saskatchewan, 1915*, p. 54 (5 Geo. 5, ch. 25, sec. 191) (summarized).

Every child over 7 and under 14 is required to attend school for the whole time during which the school is open each year. Formerly children in rural districts were required to attend 100 teaching days a year and children in towns 150 days a year.

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School attendance is required for the full term for all children 7 to 14 years of age with exemptions for sickness, or distance from school, or completion of elementary school course. Also, the child may be excused by a justice of the peace or by the principal of the school for not more than 6 weeks a term if he is satisfied that the child is needed for husbandry or work at home because of poverty.

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The school-attendance law is made to apply to all children from 6 to 14 years of age instead of only to those from 7 to 13 years of age, and attendance is now required for the entire school term.

One of the European belligerents, Hungary, has apparently made no special war exemptions.¹

NEW PLANS FOR INDUSTRIAL EDUCATION.

In England and France proposals have been made not only to establish new systems of continuation schools and additional opportunities for industrial education but also to require part-time school attendance of boys and girls who are now exempt from school-attendance laws. In England it is recommended that the school-leaving age be raised to 14 years without exemptions and that all young people under 18 who are not attending the regular schools should be enrolled in part-time classes. France does not propose to raise the school-leaving age, but a bill is pending which would require part-time attendance of girls under 18 and boys under 20. In presenting this bill M.

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makes while an apprentice as much as the unskilled youthful worker used to make." ¹

Even more incomplete are the figures available for France, Italy, and Russia.² We learn from the *Bulletin du Ministère du Travail* ³ for example, that in April, nearly 50,000 industrial establishments, not including State-owned munition works or railways, tramways, mines, and quarries, had replaced by other workers more than one-fifth of the wage earners who had been mobilized. These establishments had employed before the war one and three-quarter million workers of both sexes and all ages and of these approximately 420,000 men (24 per cent) had been called to the colors. In April, 1916, the places of some 87,800 had been filled, but how these new workers were distributed among men above military age, and women, boys, and girls does not appear. A marked increase of women workers on French railways is reported. For example, it is stated by the *Journal des Débats* ⁴ that the percentage of women railway employees in France in November, 1916, was growing daily and had already risen to proportions varying from 1 in 10 to 1 in 6 on different lines.

From France come reports also of women's work in furnace industries.⁵ As early as August, 1915, the bulletin of the minister of labor stated that "Certain of the new occupations in which women are employed seem injurious to their health and under normal circumstances the question would arise whether the employment of women in these occupations should not be regulated." ⁶

In July, 1916, the French Government ordered that all soldiers detailed to munition work must so far as possible be replaced by women,⁷ and even earlier it had been ordered that women should be employed instead of men in office work and house service at army headquarters.⁸ In September, 1916, the minister of munitions stated that 300,000 women had gone into the munition works, but he does not say how many of them were under 21 years of age.⁹

Similar orders were issued in Italy in circulars of August 23 and September 28, 1916, which stated that by October 31, 50 per cent of the men of military age in the munition works must be replaced by women and boys and that by December 31 the percentage must be brought up to 80. The second circular states that of the 355,349 wage earners employed at that time in 822 munition works only

¹ *Soziale Praxis*, Oct. 28, 1915, p. 89.

² The Austrian sources have not been reviewed.

³ June, 1916, pp. 188-190.

⁴ Quoted by *Christian Science Monitor*, Boston, Nov. 17, 1916.

⁵ *Réforme Economique*, Dec. 15, 1916.

⁶ *Bulletin du Ministère du Travail et de la Prévoyance Sociale*, Aug. 1915, p. 182.

⁷ *Ibid.*, July-Aug., 1916, p. 132.

⁸ *Ibid.*, June, 1916, p. 103.

⁹ *Le Matin*, Paris, Sept. 24, 1916.

45,628, or 13 per cent, were women. By December 31, 1916, according to the report of the national committee for munitions published early in the current year, the number of women employed in war industries had risen to 90,000, as against 430,000 men, or to 18 per cent of the total number of employees as compared with 4 per cent in November, 1915. In some plants the percentage of women has risen to 90 and even 95. While emphasizing the remarkable rapidity of this increase, the report points out the necessity of a much more general displacement of men by women, discusses the growth of technical training schools for women munition workers, and expresses the expectation of a continually increasing response of Italian women to the needs of the war industries.¹ How far this expectation has been realized, material available in this country does not yet show.

As in France the employment of women in auxiliary army services in Italy has been encouraged. Clerical work, kitchen work, laundry work, general cleaning and other work in military hospitals, and clerical work in territorial offices are especially referred to.²

The only Italian figures received concerning the employment of boys during the war refer to munition works in Lombardy.³ They are based on reports from 660 factories employing about 100,000 workers in June, 1914, and 145,000 workers in June, 1916. The number and percentage of boys employed was small and showed little change; 1,297 boys under 21, or 1.28 per cent, were employed in 1914, and 2,076 boys under 21, or 1.42 per cent, in 1916. On the other hand the number of women and girls in these plants had more than tripled and the percentage of women and girls among all workers had risen from 4.77 per cent in 1914 to 9.97 per cent in June, 1916. This indication of the slight employment of boys in comparison with that of women and girls is borne out by the report of the national committee for munitions.⁴

It may be noted that the number of boys in comparison with women is very small in large and medium sized establishments; and greater on the other hand in unimportant ones.

The reasons for this distribution of juvenile workers in contrast with that of female employees are evidently to be sought in the fact that quantitatively and qualitatively the output of boys is less than that of women, so that while the boys may be usefully employed in establishments which carry on small secondary operations they are on the other hand less adapted to take part in the large, complex, and very fatiguing processes of plants of the first importance.

The economic factor doubtless also helps to determine the distribution; it is quite natural that the factories of limited range and productivity should prefer to utilize

¹ Comitato Nazionale per il Munizionamento, *Il Lavoro Femminile nella Industria di Guerra Italiana*, January, 1917, pp. 20, 21.

² *Corriere della Sera*, Milan, Jan. 15, 1917, and Feb. 17, 1917.

³ *Città di Milano Bollettino Municipale Mensile*, Jan. 31, 1917, pp. 28, 29.

⁴ Comitato Nazionale per il Munizionamento, *Il Lavoro Femminile nella Industria di Guerra Italiana*, January, 1917, p. 22.

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Viviani referred to the fact that it would not only enforce part-time attendance of adolescents but would incidentally secure better enforcement of elementary school-attendance provisions.

The English plan is based on reports made by a special departmental committee on juvenile education in relation to employment after the war. The reports emphasize the new conception of the child's relation to education and to industry and the importance of real preparation for future work.

GREAT BRITAIN. *Final report of the Departmental Committee on Juvenile Education in Relation to Employment After the War. Vol. 1 (Mar., 1917).*

Page 5. Can the age of adolescence be brought out of the purview of economic exploitation and into that of the social conscience? Can the conception of the juvenile as primarily a little wage earner be replaced by the conception of the juvenile as primarily the workman and the citizen in training? Can it be established that the educational purpose is to be the dominating one, without as within the school doors, during those formative years between 12 and 18?

Page 2. Taken together the three groups [children and young persons who can not immediately find advantageous employment, those who require special training for employment, those who have been abnormally employed during the war] may be expected after the war to constitute a very large section of that great class of employed juveniles between the ages of 12 and 18 to which nearly all members of the community belong in their turn. Our problem, therefore, is the standing problem of the adolescent wage earner, aggravated by the effect of war time conditions upon the serious difficulties which at all times it presents.

Page 12. Even though the educational obligation [of continuation classes] may be a small one, it will still be sufficient to establish the principle that a child is no longer to be regarded as at once attaining, when he enters employment, to the fully independent status of wage-earning manhood. He will still be one under authority and open to the influences of encouragement and reproof, of the corporate life and the offered ideal, which even more than mere instruction are the essence of the educational process.

Over and above the four years' prolongation of formal education which they imply, we believe that compulsory continuation classes will carry on the moral and disciplinary influence of the elementary school, will conduce to a far higher standard of physical well-being, will increase the industrial efficiency of the mass of the population and will give those able to profit by it full opportunity for the beginnings of a valuable technical training.

Page 7. There is no doubt that it will prove easier to raise the standards of education in the towns than in the villages. Nevertheless we consider that it would be a fatal mistake to accept a lower standard as the one proper to be aimed at, and, when practical difficulties permit, attained, in these districts; not only for the large number of children who, although born and educated in villages, will certainly not spend their whole lives in those villages but also for the sake of agriculture and of the agricultural population themselves. After all, agriculture is essentially from top to bottom a skilled indus-

try, and if there is to be an agricultural revival in England, one of the most potent means of bringing it about must be an improved education, resulting both in a higher degree of farming ability and in a higher conception of the possibilities of village life.

Page 37. But a difficulty will undoubtedly arise from the attitude of the farmers, or at any rate of the majority of them. Their real object, sometimes openly avowed, is to get boys on their farms at the earliest possible age. The average farmer does not believe in education, and considers that the longer a boy remains at school, the less inclination he will have for work on the land. In the past the farmer has had some justification for this attitude, for our rural schools have been urban in outlook, and little practical work has been provided in them.

Page 39. Much of the value of the rural continuation school will depend upon the character of the curriculum adopted.

Page 38. From the farmer's point of view there is no doubt that the boy so trained, and taking up farm work at 14 will be far more useful than the boy leaving school at 13 who has received no such training. It is noteworthy that the intelligent opinion of the farming community as unanimously expressed by the central chamber of agriculture is in favor of raising the leaving age to 14 and of establishing day continuation classes for young persons up to 16.

Mr. Herbert Fisher, president of the board of education, has asked the House of Commons to grant for the education budget for the year 1917-18 a sum greater by £3,829,048 than that for the year 1916-17. This would involve the largest increase as compared with the estimates of the preceding year which is known in the history of the board. It is intended that the improvements in the schools for which this increase is requested shall be followed by the organization of continuation schools, the raising of the compulsory attendance age, and a better provision for industrial training. Mr. Fisher's speech in the House of Commons on April 19, 1917, illustrates the new attitude in England toward education.

HOUSE OF COMMONS. *Parliamentary Debates*, vol. 92, No. 41 (April 19, 1917).

Column 1910. Economy is in the air. We are told to economize in our expenditure and foodstuffs. I suggest that we should economize in the human capital of the country, our most precious possession, which we have too long neglected. I should not recommend any measure which would have the effect of disturbing the labor market during the war. But I hope that Parliament may see its way at the early date to assent to a measure which will give effect to the general principles which I have endeavored to describe, so that the foundations may be laid for a fabric of national education worthy of the genius and heroism of our people and a fitting monument to the great impulse which is animating the whole nation during the war.

Column 1884. Another feature of the present situation which can not fail to impress honorable members of this House is the remarkable interest which is now exhibited in education and which is evinced in two quarters from which a clear note has not always hitherto been sounded. Trade-unions are demanding educational reform. Many of the most enlightened employers and manufacturers are actively

promoting it. There is now a prospect new in my experience, and so far as I know new in the experience of the country, of the cooperation of the commercial and industrial interests of this country with the thoughtful energetic portion of the population to secure not only a higher standard of industrial and commercial fitness, but a higher level of general education. Some minds attach importance to education as to the foundation of industrial and military strength. Others are principally affected by the prospect that in the spread of education they may find the resolution of the discords in our industrial life. * * *

* * * A good deal may be done and should be done to diversify and improve the work of the upper standards of our elementary schools and to promote the growth of central schools. It may be assumed that a knowledge of the 3 R's is satisfactorily rooted and established by the twelfth year, and that during the two final years of school life the diet should be richer and more varied. There should be more handwork for the boys, more housecraft for the girls and more literary and inspiring education for both. Such improvements, however, require no legislation and can be effected with a minimum of cost by a better direction of educational effort. It would however be necessary so to amend the law of school attendance as to secure for every boy and girl in the country a full period of school instruction until the fourteenth year. * * *

Column 1899. In the regulations we take powers before paying the grant in any new year to review the provision made for elementary education by the authorities and to consider its adequacy and efficiency in relation not only to the local needs and circumstances but also to the development of a satisfactory system of elementary education, including the establishment of a teaching service on a sounder basis throughout the country. In particular we give notice that we intend to have regard among other things to the provision made in the area as a whole of the following objects: First, for maintaining an adequate and suitable staff of teachers; secondly, for securing the progress of the older scholars by means of special schools or otherwise; thirdly, we shall have regard to the provision made in the area as a whole for the teaching of handicraft, cookery, gardening, and other special subjects; and fourthly, the efficiency with which the law of school attendance is administered. If the board is not satisfied on any of these points, they may, after the first year, withhold or reduce the grant. * * *

The French measure introduced in March, 1917, by the Government in the Chamber of Deputies is designed, according to M. Viviani, the sponsor for the bill, "to coordinate the different proposals concerning education for adolescents."¹ Industrial education and general training for adolescents have been under discussion by parliamentary committees for several years and a bill for the establishment of continuation schools in cities and the development of trade instruction had been favorably reported by the Senate committee before the war, and was passed by the Senate in June, 1915,² but no further action has been taken upon it. Another bill on continuation schools

¹ *Le Temps*, Paris, Mar. 14, 1917, p. 4.

² *Journal Officiel*, Sén. Déb. 1916, pp. 606-608, 653-660.

in rural districts and agricultural training had been passed by the Chamber of Deputies and was favorably reported by a Senate committee on January, 1917.¹

The importance of making better provision for adolescent education has been emphasized throughout the war period.

Revue Philanthropique, June, 1916. p. 320.

A statement by the minister of public instruction will serve doubtless as the watchword for all popular educators: "As compulsory primary instruction was born of the war of 1870, there must come from the present conflict obligatory continuation school instruction."

Bulletin du Ministère du Travail et de la Prévoyance Sociale, May-June, 1915. p. 31.

Since the beginning of hostilities, my department has been concerned with the condition of young people from 13 to 18 years of age who because of the closing of stores and workshops are without employment, left to themselves, and deprived of all technical instruction, although at the close of the war the nation's industry will more than ever need skilled workers. To avoid, so far as possible, the serious results which might follow if this condition continued, I have brought the matter before the permanent committee of the superior labor council, so that it may find ways and means to employ these young people for a part of the day at least and to aid them in securing their trade training.

After making inquiry with the Parisian chambres syndicales and comités de patronage d'apprentis, the permanent committee, at its sessions of September 30 and November 25, 1914, adopted a series of resolutions, from which I quote the following:

"That young people under 18 should continue their school work or be employed in industrial or commercial establishments, or else attend trade courses during the day. Parents should be informed that the additional allowance of 50 centimes a day, provided in the unemployment fund [for each child who is unemployed] can be withdrawn if, through their fault, the unemployed child is attending neither school nor trade course.

"That the investigators of the labor office take steps with the chambres syndicales of the various industries in order to secure the organization of trade courses and of work suitable for young people from 13 to 18 years of age."

The permanent committee has also passed resolutions to direct certain Government orders, especially in mechanical occupations, to "la petite industrie" so as to support the small and medium-sized workshops and enable them thus to train apprentices; to organize with the assistance of the apprenticeship committees prevocational courses in the available shops, while insisting that manufacturers having any equipment (outillage) not in use shall be obliged to employ children several hours a day; to request employers working for the State to employ young people in their shops and factories; to authorize the State-owned factories and shops, which ordinarily do not receive apprentices, to take children from 13 to 18 years of age during the war. * * *

¹ Journal Officiel, Sen. Doc. 1917, No. 7, p. 62.

In the city of Paris satisfactory results have been secured for certain industries and in a certain number of districts. I should especially refer to the happy efforts made by several *chambres syndicales* of employers and workers who have—especially in the building trades, bronze work, jewelry, “*bijouterie-fantaisie*,” furniture, etc.—started practical and theoretical courses.

* * * Certain of the mixed committees, whose organization I requested in my circular of February 5, have concerned themselves with the question. * * * I would call your attention especially to the important rôle which may be played in the instruction and the placing of young people by these mixed committees and by the apprenticeship committees, organized by articles 117, 118, and 119 of Book II of the Labor Code, whose object is the protection of apprentices and children in industry and the development of trade instruction.

The reports of the apprenticeship committees referred to in this circular have not been received. The recommendations of the provincial mixed committees on apprenticeship and trade instruction are summarized in the bulletin of the minister of labor. They vary in detail but they uniformly recognize the importance of the subject even in time of war. Of special interest is the report of the committee of the Seine, which includes the city of Paris.

Bulletin du Ministère du Travail et de la Prévoyance Sociale, July-August, 1916, p. 287.

The commission of the Seine demands the organization of prevocational manual training given, in the elementary school, to children of 12 to 13 years (and if necessary until 14 years, if compulsory school attendance is extended to 14 years); it desires that, beginning with the elementary school, attention be given to vocational guidance of children.

This commission, while recognizing the services rendered by the existing special schools, is of the opinion that trade instruction properly so-called can be given only in the workshop and can be required only in trades where it is necessary; it wishes that, during the period of apprenticeship, the learner may follow the supplementary courses which it will have been possible to organize. * * *

For children engaged only in unskilled work, the attendance at supplementary trade classes should be facilitated so as to enable them to learn a trade in their industry. The time devoted to supplementary trade classes should be included in the length of the working day. * * *

As unemployment gave way to an intense demand for labor, the interest in industrial education continued with new emphasis on the importance to the future of France of developing to the utmost the intelligence and skill of every child. Thus, in the Senate debate on the bill which was passed by the Senate in June, 1916, occur the following statements:

Journal Officiel, Sénat, Débats, 1916, pp. 597, 600, 659 (summarized).

M. Clémentel, minister of commerce, says: “We must begin at once to prepare in these two Chambers the work of to-morrow. We

must forge together the necessary arms for the economic struggle which, let us be quite certain, will be more bitter, more violent than it was in the past. * * * One may say that the supply of our leaders of industry and of our engineers is assured; our great schools provide for that. * * *

“Let us recognize that it is quite otherwise, whatever be the reason, for the rank and file of our industrial army.” He deplors the decline of skill and says: “This danger, it seems to me, is an especial menace for the future. * * * I am convinced that it would be the worst improvidence to wait for the end of hostilities to train the young recruits on whom depends the hope of our industrial renaissance.”

M. Astier reads from the *Journal des Chambres de Commerce* of May 25, 1916, on the bill under discussion: “Any additional delay in the discussion and adoption of this bill, well-considered and to-day necessary, would be prejudicial to the vital interests of the country.”

M. Painlevé, the minister of public instruction, says: “If there is one thing which this war has made plain, it is the immeasurable value of the individual Frenchman, his inexhaustible resources of valor, of tenacity, of invention. A government would be no longer worthy of the name which did not use its every effort to develop fully the mental wealth which is found in the children of France, these future workers of the most generous of civilizations.”

WAR EXEMPTIONS.

The power to grant special war-time exemptions to labor laws affecting women and children was secured by legislation or by decree during the first month of the war in Germany and Austria and in the two neutral countries, Italy and Switzerland. In France inspectors were authorized by the minister of labor to grant the exemptions for the national defense which were provided for in the labor code. The Russian exemption measure was not enacted until March, 1915. In England under the factory and workshop act the secretary of state possessed the power to exempt from the factory act establishments owned by the Crown or working for the Crown; in June, 1915, his power was extended to include other establishments.

The nature of the exemptions and the extent to which they were used have varied in the different countries. In practically all, some movement for restoring standards is reported; in England, France, and Italy official action has been taken; in Austria the decree permitting overtime exemptions was canceled for the cotton industry because there was danger of unemployment through scarcity of raw materials. From these countries and others come reports of dissatisfaction of the workers and testimony of physicians concerning the effects of excessive hours. The greater efficiency of a reasonable working day is mentioned frequently.

AUSTRIA-HUNGARY.¹

The Austrian exemptions do not appear to affect the age limits for employment. It should be noted that permits for night work by women and girls may be more freely granted than those for night work by boys 14 to 16, because the welfare of the boys is considered important to the future defense of the State. Protests against excessive hours during the war have been made by a convention of workers. The only official action withdrawing special war exemptions has been concerned with the cotton industry and it is expressly stated that the reason for restricting hours in cotton establishments is the postponement of the unemployment that would result from a scarcity of raw materials. The only change in labor standards reported from Hungary is a new prohibition of night work in bakeries between 6 p. m. and 6 a. m. by a ministerial order of June 24, 1916.²

Bulletin of the International Labor Office, Vol. X.

Page 54, footnote (summarized). Seven of the Austrian provinces on dates from July 26, 1914, to August 5, 1914, annulled their shop-closing orders until further notice.

Pages 55, 56 (summarized). On July 31, 1914, an imperial order (R. G. Bl. No. 183) authorized the minister of commerce in agreement with the minister for the interior and the minister for public worship and education to annul temporarily as a whole or in part the law providing for Sunday and holiday rest in industrial undertakings. A ministerial order was issued on the same day (R. G. Bl. No. 184) annulling the provisions until further orders.

Page 59 (summarized). On August 9, 1914, an imperial order (R. G. Bl. No. 219) authorized the minister for public works to grant exemptions during the war from the regulations in regard to Sunday rest and the payment of wages in mining undertakings.

Page 60 (summarized). On August 31, 1914, the minister of commerce ordered that the granting of permits for overtime work in industrial undertakings should be restricted to the utmost and that, more especially in industries working on military contracts, which were at the time exceptionally busy, an effort should be made—as far as this was possible without adversely affecting the punctual delivery and the quality of the goods—to supply the additional labor required by appointing fresh workers instead of by overtime work.

Bulletin of the International Labor Office, Vol. XI, p. 31 (summarized).

Royal order of October 10, 1914 (R. G. Bl. No. 274) empowered the Government to adopt economic measures which might be necessary on account of the extraordinary circumstances caused by the war.

On September 11, 1915, the minister of commerce issued a decree empowering provincial authorities to grant exemptions to the prohibition of night work for women and girls in the case of indus-

¹ Bulletin of the International Labor Office, 1915, 1916, and January-February, 1917, is the chief source of information for Austria and Hungary.

² Ibid., Vol. XV (German edition), p. 291.

trial undertakings supplying urgent military necessities or important articles of consumption needed for provisioning the people. Each individual application for exemptions must be investigated by the competent industrial inspector and if the inspector and the provincial authorities disagreed as to whether permit should be granted the ministry of commerce would decide.

Petitions to employ boys between 14 and 16 years of age at night, in so far as this night work was not already allowed (act of May 27, 1885, which permitted night work under 16 in the scythe industry, silk-spinning, and in hotels and restaurants) should be subject to an especially rigid inquiry and all such cases were to be referred to the ministry of commerce for decision.

In view of the special necessity for protecting this class of workers (boys under 16 years old) which was so important for the future defense of the State, such requests for exemptions permitting their employment could be considered only in quite exceptional cases, even where the above-mentioned conditions for the employment of women and girls at night were present.

Registers of permits granted were to be sent quarterly to the ministry of commerce.

The decree stated that legal grounds for permitting night work by women and young persons were found in the royal order of October 10, 1914 (see above) but that exemptions had not hitherto been granted because of the special expediency of protecting women and young persons. They would now be considered because of the extension of compulsory military service to higher age groups and the shortage of adult male workers.

Bulletin of the International Labor Office, January-February, 1915, Vol. X, p. 59, and January-February, 1916, Vol. XI, p. 33 (summarized).

The Sunday and holiday rest law was restored in the book-printing trade by ministerial order of August 20, 1914, and in commercial establishments by ministerial order of December 28, 1915.

Bulletin of the International Labor Office, Vol. XI, p. 32 (summarized).

A decree of the minister of commerce, October 21, 1915, instructed the provincial authorities to make no use of the power given by the department's decree of September 11, 1915, to grant exceptional permission to employ women and young persons overtime or at night in establishments where cotton was prepared. In all cases where requests for exceptional overtime or night work were made by such establishments the requests should be submitted to the ministry of commerce which would strictly investigate the case and grant the exemption only when an unavoidably urgent requirement of the army was in question. The reason for this order was the danger of unemployment because of scarcity of raw material.

At the convention of Austrian workers held in Vienna, November 5, 1916, resolutions were passed demanding restoration of industrial standards.

Bulletin of the International Labor Office, Vol. XV (German edition), p. 289 (summarized).

The convention demands for all workers under the war service law: (1) Government protection of right to wages and of wage agreements and the adjustment of wages to the increased prices. Equal

pay for women for equal work. Payments of maintenance of families of those workers who were called to service away from their regular residence.

(2) Strict inspection of industries for the purpose of protecting the workers' health, complete prohibition of employment of children under 14, an increase in the number of factory inspectors, and the invitation to women with a professional education to become inspectors.

(3) The protection of the workers' right to organize and right of assembly; also their civil rights.

The war has clearly shown the evils connected with the old way of giving out contracts for supplies for clothing. Hitherto the ministries have been concerned only with the price, not with the producers. The feeble efforts lately made in this Province are wholly insufficient. Hence it has come about that the contractors and manufacturers to secure the largest possible profits have lowered wages as far as possible. But in the factories also where working and wage conditions were regulated before the war the employers are now given full freedom by the employment of unskilled men and women and by the suspension of protective labor laws and of the right of organization.

FRANCE.

In France the only apparent lowering of age limits has been the admission in 1915 of children 11 years and 6 months old instead of 12 years old to the examination held annually in July for a primary education certificate which exempts from school attendance. It should be remembered, however, that children holding this certificate are not admitted to factory employment unless they pass the test of physical fitness. The exemptions granted in accordance with the circulars of August, 1914, seem to have been concerned chiefly with night work and overtime.

In June, 1916, the night work prohibition was restored for girls under 18 and in January, 1917, for expectant mothers and for mothers who are nursing young babies. Other night workers are now subject to constant supervision and women who show irregular attendance because of sickness are transferred to the day shift.

The three-shift system in continuous industries is recommended but not required.

Bulletin du Ministère du Travail, 1914, pp. 99, 100*; 1902, p. 340; 1913, Actes et Documents, p. 20* (summarized).*

On the 2d of August, 1914, the minister of labor addressed a circular to the inspectors of labor, authorizing them to grant exemptions from the restrictions of hours provided in the labor law in accordance with permission contained in the decrees of March 28, 1902, and June 30, 1913. The decree of March 28, 1902, is concerned with exemptions to the hours of work for adult males. The decree of June 30, 1913, lists occupations in which exemptions may, under special circumstances, be granted and the periods over which exemptions may be extended.

The night-work exemptions include metal works, in which women (*femmes majeures*) and boys under 18 may be employed after 9 p. m. and before 5 a. m., the working period not to be more than 10 hours in the 24. Exemptions to the 10-hour working day for women and children under 18 may be temporarily permitted in 58 classes of establishments; among them are "industrial establishments in which work is being done on Government order and in the interest of national safety and defense, after notice from the ministers concerned, stating expressly the necessity for exemption."

On August 5, 1914, the minister of labor issued a circular instructing the labor inspectors to encourage the continuance of production by the employment of adolescents, women, and old men to take the place of men who had been mobilized.

On August 14, 1914, he said: "As supplementary to my circular of August 5 and in reply to divers questions which have been addressed to me, I have the honor to inform you that in the application of laws regulating labor the largest tolerance should everywhere be granted to encourage national production. Official reports [of violations] should be made only after warning and in exceptional cases where the head of the establishment continues, in spite of warning, practices likely to affect the health of the workers."

On August 22, 1914, the minister of labor cautioned the inspectors against permitting overtime in establishments in neighborhoods where there was acute unemployment. "You will require manufacturers to employ additional labor in so far as possible, and, except in work for the national defense, you will indicate that you can not allow exemptions which are so little necessary."

The compulsory school-attendance law permitted before the war exemptions amounting to three months in the year in addition to vacations. No change in these provisions during the war is reported. The age at which a primary certificate might be obtained, permanently exempting the child from school attendance, was reduced from 12 years to 11 years and 6 months for the examinations in July, 1915.¹ Whether a similar reduction was permitted in 1916 does not appear.

Bulletin du Ministère du Travail, 1915, p. 45 (summarized).

In June, 1915, the minister of war, admitting that it is not possible to enforce all the provisions of the decree of August 19, 1899, in regard to conditions of labor on Government contracts, urges administrative bodies to apply them wherever possible, especially to require the insertion of the clause requiring contractors to pay the normal wage current in the district. "The war office states that a clause specifying that a fortnightly day of rest must be allowed should be inserted in all contracts, the manufacturers, in the course of meetings held at the war office, having admitted that this ought to be done."²

Bulletin of the International Labor Office, Vol. X, p. 206 (summarized).

A law providing for the fixing of minimum wages for home workers was passed on July 10, 1915. In summarizing its provisions and

¹ *Journal Officiel*, Ch. Dép. Déb. 1915, Question No. 901, p. 276; Ministère de l'Instruction Publique, Circular Mar. 4, 1915, *Journal Officiel*, Mar. 5, 1915.

² Ministère de la Guerre, Circular June 5, 1915.

providing for the details of its administration, the minister of labor in a circular of July 24, 1915, says: "Though the development of home work on army requirements (clothing, bandages, etc.) hastened the passage of the law, the matter of adequate wages for home workers had been discussed for several years, and the law is intended to be permanent, not merely to meet special requirements."

*Bulletin du Ministère du Travail, May-June, 1915, p. 31** (summarized).

The permanent committee of the superior labor council passed resolutions in the autumn of 1914,¹ when many young people under 18 years were unemployed, suggesting that manufacturers working for the State should employ boys in their shops and factories and that the State-owned factories and shops, which ordinarily do not receive apprentices, should be authorized to take children from 13 to 18 years of age during the war.

[No published order to this effect has been received, but it appears from the prohibition of night work by girls under 18 in munition works of June 29, 1916,² that the suggestion of the superior labor council was, in part at least, followed.]

Sous-Secrétariat de l'Artillerie et des Munitions, Bulletin des Usines de Guerre, July 10, 1916, p. 84 (summarized).

The under secretary of state for arms and munitions, after consultation with the advisory labor committee for establishments under the office of arms and munitions, decides that "where women over 18 years of age can not be secured, girls from 16 to 18, after a thorough medical examination, may be employed in Government powder plants in rooms where there are no dangerous gases. They may be employed only for daywork and must receive the same wages as older women. This is an exceptional permission for the war time only. The management must prove that no older women can be secured even through the central employment office. The circular refers also to encouraging older women to enter the works by providing for housing, food, and infant welfare. It specifies that a physician must keep careful supervision of the workrooms in which girls 16 to 18 are employed.

The following suggestion appears to encourage the employment in munition works of young people under 18 years of age.

Sous-Secrétariat de l'Artillerie et des Munitions, Bulletin des Usines de Guerre, July 17, 1916, p. 87.

Among the most interesting innovations in the payment of wages, it seems that the method adopted in a large metal factory in the west deserves an important place. In order to facilitate the employment of women by uniting a whole family in the same shop or the same factory, it was decided to offer a special premium for family labor. When three persons from one family work in the factory the head of the family received a special premium of 75 centimes a day; when the number of members of one family working in the same establishment rises to four persons, the premium will be 1 franc a day. * * * This is a precedent which deserves to be published and followed.

¹ See p. 23.

² See p. 33.

The variety of opinions about these exemptions is reflected in the reports of the provincial mixed commissions for the year 1915, which are summarized in the bulletin of the minister of labor.

Bulletin du Ministère du Travail et de la Prévoyance Sociale, July-August, 1916, p. 288.
(*Travaux des commissions mixtes départementales pour le maintien du travail national.*
Réglementation du travail.)

In the presence of the difficulty of recruiting necessary male labor and in order to facilitate the employment of women and young workers, the commissions have considered the adoption of certain modifications in the application of laws regulating labor.

The Ain demands the continuance of the exemptions of the circular of the minister of labor, August 14, 1914, until the normal resumption of work. Other commissions suggest more extended modifications, authorization for women to work before 5 in the morning and after 9 in the evening, to the extent of 10 hours of work (Charente); temporary abrogation of the restrictions of labor or power given to labor inspectors to suspend their application, especially in that which concerns the employment of women and children (Ariege, Haute-Saone); exemptions in the regulation of labor of women and children, provided that the interests of the workers shall not be affected, especially their wages (Isere); suspension, so far as possible, of the enforcement of restrictions on child labor (Yonne); to facilitate the resumption of maritime fishing, temporary authorization to use boys of less than 13 years (Corsica); modification of labor legislation in accordance with the seasonal character of the fish-canning industry and in order to establish agreements by which conflicts between employers and workers might be restricted (Vendee).

On the contrary, in the Rhone and the Gironde, they wish a complete enforcement of laws regulating labor, the strengthening of inspection, the appointment of inspectors selected by the workers and by class.

In the Seine-Inférieure they wish to see reduced to 10 hours the working period in stores, shops, offices; to prohibit night work and Sunday work; and to limit the exemptions.

The Government emphasized from the beginning of the war the importance of protecting the health of the workers. In February, 1916, the minister of war appointed a committee on women's work and instructed them to study and report on the conditions necessary for the protection of women, especially in munition plants.

Bulletin du Ministère du Travail, January-February, 1916. Sous-Secrétaire d'Etat de l'Artillerie et des Munitions, Circular February 28, 1916.

* * * On hygienic conditions of work, I can only renew my recommendations to give them all necessary attention.

In regard to length of working-day, a weekly rest day, and night work, if it has been necessary to use the exemptions permitted by law, it is important to limit them strictly to that which is indispensable and which does not endanger the efficiency nor the health of the worker. * * * These general directions give no positive answer to individual questions which may arise for managers and manufacturers and which may involve difficulties or hindrances which should be avoided. To study these concrete cases and to sug-

gest solutions unaffected by local considerations and individual interests involved, I have therefore decided to appoint to assist me a committee on women's work (*comité du travail féminin*), before which these cases can be brought by one of the parties or by the controllers of labor supply, and whose opinion will be submitted for my approval before having the force of an order.

The consultations of this committee, which shall be concerned with all kinds of useful information and with both the general welfare and the special cases under discussion, will serve, I doubt not, to provide for women's work in its new adaptations the regulations which it needs and deserves, and which the State, natural protector of the weak, is under obligation to provide.

Sous-Secrétariat de l'Artillerie et des Munitions, Bulletin des Usines de Guerre, May 15, 1916, p. 21 (summarized).

In telling employers of the appointment of the committee on women's work, the under secretary of arms and munitions refers to the difficulties of securing additional women workers and adapting the organization of the factory to their needs. "To these difficulties is added concern for giving to the woman employed in industry the material and moral safeguards for which, as I take pleasure in acknowledging, your industry and that of various private organizations have already led to some provisions."

To the labor unions he writes: "I have taken pains to assure to these women workers the essential safeguards provided for them in our labor laws and the terms of the decrees of August 10, 1899, about wages. * * * The work of this committee should not only permit a rapid accomplishment of indispensable improvements but even more should contribute to regulating the conditions of women's employment in certain industries."

The minister of war emphasized again in March the importance of regulating hours.

Bulletin du Ministère du Travail, June, 1916, p. 94. Ministère de la Guerre, Circular, March 24, 1916.*

Finally, from various sides public opinion expresses some surprise at seeing work interrupted on Sunday and stopping at night in certain establishments. There should be no question of shortening the rest period granted to workers and revoking the measures which experience has led us to prescribe. The labor power must be safeguarded, as much in view of the prolonging of the struggle as of the economic needs of the country after the war. But at the moment when the army is making its most formidable effort, the production of the factories should not be slowed down or stopped for a single instant. It is for you, by a better organization of labor, by a judicious arrangement of shifts, and by the suitable use of auxiliaries, to establish a rotation and alternation which will assure the continuity of work day and night, without interruption on Sunday.

In June, 1916, special schedules of hours were suggested by the office of arms and munitions for the women in munition factories who were engaged on heavy work, in order that even in factories where only two shifts were employed for most of the work these

women might be organized in three shifts, each working only 7 hours, or 7 hours and 30 minutes.¹ Later in the month the under secretary for arms and munitions prohibited the employment of girls under 18 years of age at night in munition works and permitted the employment of those under 21 at night only as an exceptional and temporary measure.

Bulletin du Ministère du Travail, July-August, 1916, p. 131. Sous-Secrétariat de l'Artillerie et des Munitions, circular on night work of women, June 29, 1916.*

The necessity of pushing the production of munitions indispensable to the national defense has demanded that, in a certain number of establishments, women take part in night work, like men. It is important, however, to watch with the greatest care lest this exceptional and temporary measure involve for the health and morals of the working women disadvantages which our labor legislation has been designed to prevent, and to limit to a minimum the exemptions allowed.

I beg you, therefore, to comply with the following instructions which I have decided upon, with the advice of the committee on women's work.

The employment of young girls, less than 18 years of age, in night work shall be forbidden.

You will permit only as an exceptional right and temporarily the employment of working women from 18 to 21 years of age in night work. You will not grant this authorization except after you have ascertained that the scarcity of female labor does not enable the manufacturers to arrange for additional workers enough to replace these women in the night shifts.

I shall ask you to examine the make-up of the night shifts, with the assistance of the manufacturers, in order to avoid the dangers or the serious disadvantages which night work may present for certain women, women whose frequent absences reveal precarious condition of health, women who are pregnant, mothers of families who are obliged to care for young children, etc.

I have decided that the actual period of work for women employed at night shall not be longer than 10 hours, and that it should, if possible, be less. The organization of work by shifts will be, furthermore, the subject of a later circular. You will, in every case, have to be assured that work is broken by the rest periods necessary for good health and arranged so as to further at the same time a reasonable organization of work and the convenience of the working women. It will be for you to control the schedules of hours and to arrange modifications when necessary. If these rest periods have a certain length, you will insist that the manufacturers place at the exclusive disposal of the women a room specially furnished and including sufficient equipment for the heating of food.

You will assure yourselves, finally, that manufacturers have taken all necessary measures to insure at night good order in their workshops.

You will give account of the measures taken in carrying out the present instructions in a special paragraph of your monthly report.

¹ Bulletin des Usines de Guerre, June 5, 1916, p. 45.

In transmitting to the inspectors of labor this circular of the under-secretary of arms and munitions, the minister of labor on July 18, 1916, emphasized the importance of restoring labor standards for the sake both of health and of output.

*Bulletin du Ministère du Travail, July-August, 1916, p. 123** (summarized).

The circulars of August 2, 3, and 14, 1914, have authorized the labor inspectors to grant the greatest indulgence in the application of laws regulating labor, in order to maintain and to increase the output of establishments doing work for the national defense. In carrying out these instructions the labor inspectors, in agreement with my department, have verbally authorized manufacturers to depart from the legal restrictions, especially those which affect the work period for night work for women. * * *

The prolongation of the war has made apparent the serious disadvantages involved in the continued use of certain of these exemptions. As the under secretary of state indicated in the address which he delivered on June 6, 1916, "The experience of war time has only demonstrated the necessity—technical, economic, and even physiological—of the labor laws enacted before the war. It is in our legislation of the time of peace that we shall find the conditions for a better and more intense production during the war. * * * The minister of labor then refers to the circular of June 29, 1916,¹ as sent out by the under secretary of state for arms and munitions upon the advice of the committee on women's work and as indicating the limits which must be observed in granting exemptions relating to night work by women.

"It is of course understood that in cases where it had appeared possible to keep well within these limits, there is no reason to extend the exemptions previously granted. These limits constitute the maximum and not a normal rule substituted merely for the legal restrictions, toward the reestablishment of which one should, on the contrary, tend so far as possible. * * *

Night work by adult women in munition factories is still permitted as a war measure, but on January 4, 1917, upon the recommendation of the committee on women's work certain limitations were added to those set forth in the circular of June 29, 1916. They prohibit night work and overtime by pregnant women and nursing mothers.² In reporting to the committee on conditions desirable for pregnant women in factories, Dr. Bonnaire made a general statement about hours.

Revue Philanthropique, January, 1917, p. 14.

From the viewpoint of resistance to fatigue, the 8-hour shift with 16 hours' rest in 24 is the most favorable. * * * The best arrangement for the pregnant women would certainly be day work on half time, that is to say, a working day of not more than 6 hours.

¹ See p. 33.

² Circular of minister of armaments and war manufactures, Jan. 4, 1917, in *Revue Philanthropique*, January, 1917, p. 36; Resolutions of the committee on women's work, December, 1916, in *Revue Philanthropique*, January, 1917, p. 34.

GERMANY.

The special act of August 4, 1914 (No. 4439), authorizing the imperial chancellor to grant exemptions from the provisions of the labor law, opened the way for an almost complete suspension of the restrictions by which women and children in industry had been protected. Available reports indicate that exemptions were granted very sparingly during the first months of the war and more frequently as the struggle progressed. The possibility of avoiding the need of exemptions by more efficient organization is referred to, but the only definite statements received from Germany about the harmful effects of the exemptions which have been granted come from social workers and workingmen. Very little information has been received since the spring of 1916. Whether the age limit for factory work has been lowered, and just what overtime has been permitted to women and children in industry, the available material does not state.

Bulletin of the International Labor Office, Vol. X.

Page 38 (summarized). On August 4, 1914, a law was passed by the Reichstag authorizing the imperial chancellor to grant exemptions "either generally or for certain districts, or for certain kinds of works, from the restrictions contained in sections 135 to 137a, paragraph 2, and section 154a of the industrial code and from the regulations issued by the federal council in pursuance of sections 120e, 120f and 139a of the industrial code, and failing such exemptions allowed by the imperial chancellor, the higher administrative authorities may upon request grant similar exemptions for individual undertakings."

[These sections of the industrial code are concerned with age limit for children's employment, hours of work for women and young persons under 16 years of age, night work, rest periods, and Sunday work for women and young persons, and the employment of children under 13 underground in mines and salt works. They prohibit the employment of women in coke ovens, in the transportation of materials, for building works, and underground in mines and salt works. They also forbid the employment of women for eight weeks in all, before and after confinement.]

Page 49. The minister for commerce and industry with respect to Sunday work during the war (Aug. 5, 1914). No objections are to be raised to Sunday work undertaken for the purpose of supplying the requirements of the army or of victualling the army and the public. This order applies to Prussia only.

Soziale Praxis, August 13, 1914, p. 1256 (summarized).

The impression that the law of August 4, 1914, has done away with all restrictions is mistaken. * * * That the higher administrative authorities should permit women [to enter] occupations injurious to their health or morals is out of the question. * * * The statement of a paper that in some cases a lack of male workers in our coal mines is met by the employment of women underground is * * * rejected officially as "unfounded rumor" with the following reasons: "The law of August 4 grants exceptions to labor limitations

only in cases of pressing need, when male workers can not be found to take the places of men called to the colors. As long, however, as there is in the Empire a superfluity of unemployed workmen * * * neither the chancellor nor the higher administrative authorities will grant permission for women to work underground."

Various requests for exemptions during the first months of the war were met by similar statements refusing exemptions so long as numbers of men were without work, except in cases of extreme need.¹ The value of efficient organization in making exemptions unnecessary and undesirable is referred to in the following statement:

Bulletin of the International Labor Office, Vol. X, p. 52.

At the request of the German central department for war supplies from tobacco factories, the industrial inspectors are to be instructed to grant immediately any exemptions from the provisions of the industrial code applied for * * *. The minister makes the following statement: "* * * It will, however, in most cases be possible by arranging the work skilfully, so to organize the undertakings that they will attain their maximum output without deviating from the labor laws, and even without causing the adult workmen to work overtime, and, at the same time, be in a position to meet the requirements of the fighting forces, whilst respecting the aims of industrial regulation and the desire for the maximum restriction of overtime, * * *"

On the other hand there are complaints regarding the administration of the law.

Soziale Praxis, Oct. 8, 1914, p. 41.

The employment of young workers in difficult industries on the ground of the emergency law of August 4, 1914, has been criticised frequently in labor papers. As everyone knows, the admission of young people should occur only exceptionally in cases of need on the ground of special authoritative permission. The granting of this permission is sometimes, however, rather arbitrary. The Bergknappe reports from Recklinghausen that the mine managers appointed sittings with the workmen's committee for the discussion of the employment of young persons, at which a member of the Government mining office was always present. If the members of the committee would not give their consent to the underground employment of young persons, the representatives of the mine managers said they would then be obliged to do away with all young workers above ground. The members of the committee then agreed to grant permission for the duration of the war and under the condition that the young persons should be given work in accord with their skill and strength, and that the hour's rest in the day, even if it consisted of several short recesses, should be respected.

Labor inspectors have been of great assistance in reducing the number of necessary exemptions.

¹ *Soziale Praxis*, August, 1914, to February, 1916.

Soziale Praxis, Feb. 18, 1915, p. 490 (summarized).

Labor inspection during the war has had to adapt itself to the changed conditions in many respects. Among other duties has been the inspection of the ways in which exception from labor limitations admissible by the law of August 4, 1914, should be granted in single cases, a matter intrusted to the labor inspectors familiar with local conditions. The latter have made a business of fighting unemployment. They have been able to inform employment bureaus frequently of industries in which there were openings. Also with their help employment bureaus have often been able to offer workers openings suited to their ability, to persuade employers to take men not particularly trained or experienced in their work; and, finally, labor inspectors have in many cases been able to provide, through employment bureaus, so many hands for factories that exceptions to the labor law already granted could be withdrawn. The attempt was made especially to do away with night and shift work for women and young persons.

Soziale Praxis, Apr. 8, 1915, p. 659 (summarized).

An official proclamation of the end of March stated that, in the interest of national defense, everything that could hinder the supplies for army needs, especially munitions, must be avoided. With this in view, it was urged that men working at home would not be behind their brothers in the field in willing sacrifice, but should be ready to labor to supply the pressing army needs during the coming holidays, and in private as well as public factories intrusted with army orders, take off only the first of the Easter holidays. Further, on March 11, the Prussian minister of commerce announced to the Government mining officials and to the mine directors that on account of the present condition of the coal market he was of the opinion, in agreement with the minister of the interior, that until further notice all kinds of work connected with the furnishing of fuel should be included under the decree of August 5.¹

The number of exemptions under the law of August 4, 1914, increased in the second year of the war.

Soziale Praxis, Dec. 16, 1915, pp. 258-259 (summarized).

The memorial of the Bavarian ministers concerning the war activity of the internal government devotes a paragraph to conditions of labor and labor inspection. * * * Through the law of August 4, the chancellor and higher administrative authorities were empowered, where army needs required, to abrogate the restrictions on the labor of women and youthful persons. According to a compilation for Bavaria for the time since the war began, 355 industries which employed 30,637 workers had been granted such exceptions. By the middle of September, 1915, exceptions had been granted to only 149 industries employing 6,497 workers.

The only protests against war exemptions to the labor laws which have been reported come from social workers, working people, and Social Democrats. They include medical testimony to the injurious effects of overtime and night work by women and young persons.

¹ See p. 35.

Zentralblatt für Gewerbehygiene, January, 1915, p. 12.

The Gesellschaft für Soziale Reform and representatives of metal workers addressed a petition¹ to the Reichstag asking for better protection of metal workers. The petition was referred to the imperial chancellor. On December 17, 1914, a hearing was held in the Federal department of the interior, with workmen and women testifying, at which speeches were made in favor of a longer minimum rest period, a shorter working time, a revision of the rules allowing the shortening of recess periods, and the introduction of longer rest periods before and after each change of shift.

Bulletin of the International Labor Office, 1916, Vol. XI, p. 239 (summarized).

On March 24, 1916, the social democratic women of Germany addressed a petition to the Reichstag urging (1) the repeal of the emergency law of August 4, 1914, according to which the imperial chancellor can grant exemptions for the duration of the war from the provisions of the industrial code concerning women, young workers, and children; (2) the introduction of an 8-hour day for women, at least in the iron industry, in mining, excavations, the removal of rubbish and other processes. The petition says that many thousands of women and young persons of both sexes are to a very considerable degree engaged in overtime, night, and Sunday work. The petition calls attention to the injurious effect of this work on the workers' health; medical testimony on this point is also appended.

GREAT BRITAIN.

The secretary of state in Great Britain had, without special war legislation, power to exempt from the restrictions of the factory act establishments belonging to the Crown or working for the Crown. By an order in council in June, 1915, this power was extended to include other establishments. Under such exemptions night work, overtime, and Sunday work by women and young persons were permitted in munition works and elsewhere.

In 1915 a committee was appointed to report on the health of the munition workers, and this committee recommended that the standards of the factory act should be restored and that at least night work should not be permitted to boys under 16 or girls under 18 years of age, Sunday work should be abolished, and the three-shift system should be introduced in all plants where operation was continuous. The reports of this committee and the report prepared for the home office by Dr. A. F. Stanley Kent, as the result of scientific experiments with industrial fatigue, emphasized the importance of moderate hours for efficiency of work and intensity of production.

Another committee having administrative powers and representing the home office, the munitions department, and the admiralty has drafted general rulings and studied the applications for special exemptions from the factory act, weighing the demands for produc-

¹ This was either at the end of the year 1914 or in the beginning of 1915. The exact date can not be learned.

tion, the needs of the workers, and the relation of hours to efficiency. As a result, night work and overtime by girls under 16 have been abolished and the one day of rest in seven for women and young persons under 18 has been restored. A general order was also issued by the secretary of state, on September 9, 1916, fixing the limits of hours which would be permitted after the 1st of October without a special exemption and stating that "applications for such special orders will not in future be entertained save in exceptional circumstances and in respect of work of a specially urgent character." This order practically reduced the amount of overtime to that permitted by the factory act before the war for certain exceptional occupations.

The local education authorities in certain districts have excused children from school attendance for agriculture and other work considered suitable to their strength. Many of the local authorities have refused to exempt children, however, and the extra-legal exemptions which have been granted are greatly deplored by the general board of education, although that board sanctioned them.

Bulletin of the International Labor Office, Vol. X, p. 374.

An order in council further amending the defense of the realm (consolidation) regulations, June 10, 1915, Sec. 6A, says: "The power of the secretary of state under section 150 of the factory and workshop act, 1901, by order, to the extent and during the period named by him, to exempt from that act, in case of public emergency, any factory or workshop belonging to the Crown, or any factory or workshop in respect of work which is being done on behalf of the Crown, shall extend to any factory or workshop in which the secretary of state is satisfied that, by reason of the loss of men through enlistment or transference to Government service, or of other circumstances arising out of the present war, exemption is necessary to secure the carrying on of work which is required in the national interest."

These exemptions, although granted in special cases only, have affected the hours of work of women and young persons under 18 years of age.

Great Britain Ministry of Munitions, Health of Munition Workers Committee, Memorandum No. 1, Sunday Labor (November, 1915), p. 4.

The committee understands that, in response to the request of employers, the home secretary has issued orders permitting Sunday labor by "protected persons" (i. e., women and young persons under 18 years of age) in a limited number of cases. At the present moment, for the whole United Kingdom there are about 50 orders covering women, girls, and boys, and also about another 30 for boys only. As a rule, employment on Sundays has only been sanctioned when the hours of work on other days of the week are moderate; and even when Sunday work has been allowed, it has been usual to impose conditions restricting employment as regards individuals, e. g.:

(a) That women and young persons shall not be employed on two consecutive Sundays.

(b) That they shall have time off on Saturday.

(c) That they shall only be employed on Sundays in cases of emergency.

(d) That they shall be employed for a portion of the day only.

Great Britain Ministry of Munitions, Health of Munition Workers Committee, Memorandum No. 13, Juvenile Employment (August, 1916).

Page 5. * * * The home office, as a rule, only authorize Sunday work on condition that each boy or girl employed on Sunday shall be given a holiday on another day in the same week, or as part of a system of 8-hour shifts in which provision is made for weekly or fortnightly periods of rest. Apart from this, permission for boys over 16 to be employed periodically on Sunday was on July 1 last only allowed in seven cases, and in three cases for boys under 16. In only one instance are boys employed every Sunday, but this is limited to boys over 16 and the total weekly hours are only about 56. In only one case are girls employed periodically on Sunday, and there the concession is confined to girls over 16. It is greatly to be hoped that all Sunday work will shortly be completely stopped.

Page 4. Under the factory and workshop act, 1901, boys and girls under 18 years of age who are legally exempt from further attendance at school may be employed for 12 hours (10½ exclusive of meal times) a day during the week and for 8 hours (7½ exclusive of meal times) on Saturdays; that is to say, for a weekly period of 60 hours.¹ Subject to some exceptions in the case of boys, all night work and Sunday work is forbidden, as also is overtime. Under section 150 of the act the secretary of state has power in case of public emergency to relax these restrictions, and since the commencement of the war this power has been widely exercised. The weekly hours have frequently been extended to 67, and in some instances even longer hours have been worked. The daily hours of employment have been extended to 14 and occasionally even to 15 hours; night work has been common; Sunday work has also been allowed, though latterly it has been largely discontinued.

Report to the U. S. Federal Trade Commission, April 17, 1917, by John Bass, special agent on industrial coordination for the Federal Trade Commission.

Toward the end of 1915 it became certain that some action would have to be taken by the ministry to deal with the question of excessive hours, more particularly those worked by women and boys. The department's attention was drawn to the fact that the maximum number of weekly hours allowed under the provisions of the general order made under the factory acts was continually being exceeded and that without the support of the ministry the home office found it increasingly difficult to insure that no persons should work excessive hours.

Exemptions to the school-attendance law have been permitted in certain districts for occupations other than agriculture.

¹ Factory and workshop act, 1901, section 26, fixing these hours, relates to nontextile factories and work shops. Shorter hours are fixed for young persons in textile factories by section 21: Twelve hours a day (10 exclusive of mealtimes) during the week, 6 hours (5 exclusive of mealtimes) in a manufacturing process, or 6½ (5½ exclusive of mealtimes) in any employment on Saturdays.

Great Britain Board of Education, Annual Report for 1915 of the Chief Medical Officer of the Board of Education, p. 106.

In a number of urban areas efforts have been made to secure the exemption of children by employers in various industrial and commercial establishments. Resolutions by trade societies and other bodies have been adopted urging local education authorities to allow children of 12 and 13 to be exempted for employment. Generally authorities have opposed such claims and have maintained that in the interest of the child the school regulations must be followed.

Several local education authorities have approached the board concerning the demand for boy labor which exists in connection with the execution of Government contracts. The board has stated that they have no authority to sanction the release of children from school on conditions other than those mentioned in the by-laws, but they consider that in the areas concerned the authority might, during the period of the war, reasonably excuse boys of the age of 13 years from school attendance, provided that certain prescribed conditions were satisfied. One of the conditions is that the employment shall be of a character suitable to the physical capacity of the boy. This of course is a matter to be dealt with by the certifying surgeon when issuing his certificate of fitness.

Board of Education.—School attendance and employment in agriculture.—Summary of returns supplied by local education authorities for the period September 1, 1914, to January 31, 1915, p. 4.

In the 23 urban areas from which replies to the questions [concerning permissions to leave school granted by local education authorities] have been received it does not appear that the exemptions have in any case been confined to specified industries. * * * In 10 areas it is stated that the children exempted were nearly 14 years of age at the date of exemption and in only 2 cases have the exemptions been confined to cases where the employer has lost workpeople by enlistment. Generally in urban areas the information furnished appears to show that there has been no great variation from the usual practice in the matter. At all times children have been granted exemption in very special circumstances, and the only effect of the war has been that such special circumstances have arisen a little more frequently than they did in normal times.

In September, 1915, the minister of munitions with the concurrence of the home secretary appointed the health of munitions workers committee "To consider and advise on questions of industrial fatigue, hours of labor, and other matters affecting the physical health and physical efficiency of workers in munition factories and workshops." The reports of this committee recommend a return to regular labor standards and emphasize the ill effects of night work and overtime from the viewpoint of both health and efficiency.

Reports on industrial fatigue, based on war conditions, were also prepared for the home office by Dr. A. F. Stanley Kent, of the University of Bristol. These are especially concerned with the relation of fatigue and output and emphasize the importance of a working-day of reasonable length.

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Great Britain Ministry of Munitions, Health of Munion Workers Committee, Memorandum No. 7, Industrial Fatigue and its Causes (January, 1916), p. 10.

Taking the country as a whole the committee are bound to record their impression that the munion workers in general have been allowed to reach a state of reduced efficiency and lowered health which might have been avoided without reduction of output by attention to the details of daily and weekly rests.

Ministry of Munitions, Health of Munion Workers Committee, Memorandum No. 13, Juvenile Employment (August, 1916).

Page 3. It is necessary to guard not only against immediate breakdown but also against the imposition of strains which may stunt future growth and development. Long hours of work by day or by night, often coupled with unsatisfactory conditions of housing and transit, late hours and lack of parental care, make the dangers great and immediate. * * *

Very young girls show almost immediately * * * symptoms of lassitude, exhaustion, and impaired vitality under the influence of employment at night. A very strong similar impression was made * * * by the appearance of large numbers of young boys who had been working at munitions for a long time on alternate night and day shifts.

Page 4. A recent witness before this committee has expressed the view that boys between 16 and 18 were quite different from boys under 16; they were much stronger. Boys under 16, on the other hand, were probably more delicate than girls of the same age, and more likely to break themselves up. The essential safeguards were the reduction of hours and welfare work. Apart from the strain on the health involved, long hours had disastrous effects upon the characters of boys. They also might make an adequate amount of sleep difficult, and, perhaps most important, they prevented adequate facilities for recreation. * * * Eight hours of sleep at least were essential, nine hours would be better. Unfortunately, many boys got only six or seven hours.

Ministry of Munitions, Health of Munion Workers Committee, Memorandum No. 5, Hours of Work (January, 1916), p. 8.

Boys like men are generally employed on 12-hour shifts. It does not seem practical to suggest any change of system, but the committee hope that care will be taken to watch the effect of night work on individual boys and to limit it as far as possible to those over 16.

Ministry of Munitions, Health of Munion Workers Committee, Memorandum No. 13, Juvenile Employment (August, 1916), p. 5.

Similar difficulties [in limiting the working hours of boys, because they are frequently used to assist men working in long shifts] do not often arise in regard to the employment of girls, and as employment has become more organized a noticeable reduction has taken place in the hours of work. Employers have increasingly recognized that there are definite limits beyond which women and girls can not usefully be employed. At a number of factories the three-shift system has been introduced.

Ministry of Munitions, Health of Munition Workers Committee, Memorandum No. 5, Hours of Work (January, 1916), p. 7.

They [eight-hour shifts] involve little or no strain on the workers; the periods during which machinery must stand idle for meals are very much reduced, while significant statements have been put before the committee claiming beneficial effects upon output.

Ministry of Munitions, Health of Munition Workers Committee, Memorandum No. 4, Employment of Women (January, 1916), p. 6.

The disadvantages of an overtime system are being increasingly recognized by employers. The recognition has been forced upon some by the resultant fatigue, illness, and bad timekeeping of the workers; to others it has come by some accidental shortening of the day, which has shown that the loss of hours has carried with it no diminution in output. * * * Again, several employers of different kinds who, accustomed to work their women from 8 to 8 were forced by lighting regulations and other causes to stop at 6, found the output undiminished.

Home Office, Second Interim Report on an Investigation of Industrial Fatigue by Physiological Methods (August, 1916).

Page 44. A worker employed for 10 hours per day may produce a greater output than when employed for 12 hours, the extra rest being more than sufficient to compensate for the loss of time.

A worker employed for 8 hours per day may produce a greater output than another of equal capacity working 12 hours per day.

A group of workers showed an absolute increase of over 5 per cent of output as a result of diminution of 16½ per cent in the length of the working-day.

Another group increased their average rate of output from 262 to 276 as a result of shortening the day from 12 hours to 10 and to 316 on a further shortening of 2 hours.

The time "lost" by factory workers may approach an average of 10 per cent of the working-day. The amount lost varies with the length of the working-day and appears to depend upon fatigue.

Total daily output may be diminished by the introduction of overtime.

Under the conditions studied neither rate of working nor total output attains a maximum when a 12-hour day is adopted.

Page 43. During the middle periods of the day output is normally high, but is lowered by the working of overtime. This diminution is often so great that the total daily output is less when overtime is worked than when it is suspended. Thus overtime defeats its own object.

The unsatisfactory output of the overtime period is due to fatigue.

Page 4. It has nevertheless been proved that the output of workers during the overtime period is far less than the output during the hours of normal labor. And in my opinion the results of experiments indicate that this lessening of output in the period of overtime is due to fatigue.

Annual Report of the Chief Inspector of Factories and Workshops for the Year 1915, p. 13.

The tendency grew as the year passed to substitute a system of shifts for the long day followed by overtime, and this is particularly

reported of munition factories in the Midlands and in Sheffield. * * * The number of days on which overtime was actually worked tended in many factories to decrease as experience grew of accumulating fatigue and lessened output. Probably for similar reasons Sunday labor also has tended latterly to decrease.

Ministry of Munitions, Health of Munition Workers Committee, Memorandum No. 4, Employment of Women (January, 1916), p. 6.

The committee recommend the adoption of the three-shifts system without overtime, wherever a sufficient supply of labor is available. Where the supply is governed by difficulties of housing and transit, the committee are of opinion that every effort should be made to overcome these difficulties before a less serviceable system be continued or adopted.

Ministry of Munitions, Health of Munition Workers Committee, Memorandum No. 1, Sunday Labor (November, 1915), p. 5.

Should the early stoppage of all Sunday work be considered for any reason difficult, if not impossible to bring about, the committee trust that it will at least be practicable to lay down the principle that Sunday labor is a serious evil which should be steadily and systematically discouraged and restricted.

Annual Report of the Chief Inspector of Factories and Workshops for the year 1915, p. 6.

Sunday labor has been found to be more and more unsatisfactory; apart from the ill effects which must follow from a long-continued spell of working seven days a week, it too often results in loss of time on other days of the week and in consequent disorganization, and employers were perhaps the more ready therefore to accept the recommendations of the health of munition workers committee that it should be abandoned. They have been encouraged, too, in this direction by the action of the ministry, who issued a circular to all controlled factories, urging the importance in the interests both of the workers and production that a weekly rest period—preferably Sunday—should be secured to all workers. The following is an extract:

“The aim should be to work not more than 12 shifts per fortnight or 24 where double shifts are worked. Where three 8-hour shifts are worked, not less than two should be omitted on Sunday. It is, in the opinion of the minister, preferable to work a moderate amount of overtime during the week, allowing a break on Sunday, rather than work continuously from day to day. It is still more strongly his view that where overtime is worked in the week, Sunday labor is not desirable.”

Ministry of Munitions, Health of Munition Workers Committee, Memorandum No. 13, Juvenile Employment (August, 1916), p. 5.

The committee remain of the opinion that girls under 18 and boys under 16 should only be employed at night if other labor can not be obtained. Wherever possible it should be stopped. In March last in reply to an inquiry as to the employment of girls of 15 at night, the parliamentary secretary to the ministry stated that, “The general practice of the home office, in consultation with the ministry of munitions, has been and is, to refuse all proposals for the employment of such young girls on night shifts. In one or two cases, however,

through exceptional circumstances a departure has been made from this practice. These cases are now under review with the object of arranging for the discontinuance of such employment at the earliest possible moment."

As an administrative measure, toward the end of 1915 an inter-departmental committee on hours of labor was set up to insure that the ministry was fully informed as to the points at issue, and also to focus the attention of its officials on the importance of regulating the number of hours which could be worked to maintain adequate efficiency. The memoranda of the health of munition workers committee served as a basis for the committee's work. The committee includes a representative of the home office, who is responsible for the conditions of employment of women, girls, and boys in munition factories, and officers representing the admiralty and the various supply departments and welfare section of the ministry.¹ As a result of the committee's work certain definite orders have been issued for controlled factories, eliminating night work by girls under 16 years of age, providing one day of rest in seven for all females, and practically eliminating Sunday production in certain kinds of plants.

Bass, John, Report to U. S. Federal Trade Commission, Apr. 17, 1917.

At a meeting of the committee held on the 4th of July [1916] an arrangement was finally agreed upon whereby the employment of boys was subject to the approval of the home office factory inspector and the ministry's superintending engineer. Any difficulties which might arise between these two officers were to be referred to the home office and the ministry for decision. In admiralty cases the same procedure was to be followed, but the ministry's engineer, before expressing an opinion, would consult the admiralty representative for the area in question.

The question of the employment of girls under 16 years of age at night occupied the attention of the committee for several months. The employment of these girls is chiefly in the small arms factories.

* * * The employment of girls of this age at night has been forbidden.

After the committee had met a considerable number of times it became clear that there was a certain body of opinion amongst employers in favor of the discontinuance of Sunday labor altogether. The question, however, proved very difficult and complicated owing to the continual variation in the needs of output and to the variety of the work. * * * It was found possible on the 8th of October [1916] to notify all the firms in this district [northeast coast area] that on that date Sunday labor must be discontinued except on urgent work and necessary repairs to plant. * * * A report was received as to the effect which the action of the committee had had in the Tyne and Tees area which tended to show that beneficial effects both on output no less than on the welfare of the workers had resulted from the committee's action. * * * The question of Sunday labor

¹ Bass, John, Report to U. S. Federal Trade Commission, Apr. 17, 1917.

in national projectile and shell factories came before the committee * * * [and] it was agreed that Sunday labor for protected persons should be discontinued altogether with the exception in the case of the national projectile factories that a short shift on Sundays might be worked for the purpose of rectification of shells and the straightening up of shops. * * * Sunday labor in explosives factories where work has necessarily to be continued over the week-end was considered by the committee early in January with the result that the department of explosives supply agreed to provide for every female worker a satisfactory rest period, by arranging as far as possible that eight women should be employed to undertake the work of seven thus providing that no individual woman should work more than six days a week.

On the 9th of September, 1916, the home office issued a general order applicable to "all munition factories and workshops or parts thereof belonging to or controlled by the Crown—including all controlled establishments under the munitions of war acts 1915 and 1916 (not being textile factories) which are not specifically regulated by any other order * * * and such other classes of factories and workshops engaged on munitions work as the secretary of state may from time to time direct * * *. Hours not allowed by the factory act or the order in question are not to be worked after the 1st of October, 1916, unless expressly sanctioned by special order from the home office. Applications for such special orders will not in future be entertained save in exceptional circumstances and in respect of work of a specially urgent character."¹

Four schemes of employment are outlined, and employers may adopt any one or any combination. No boys under 14 or girls under 16 are to be employed overtime. If females are employed on night shifts, they must be supervised by a welfare worker or responsible forewoman.

Home Office General Order, Sept. 9, 1916, p. 1.

SCHEME A. (THREE SHIFTS.)

This scheme applies to women and female young persons of 16 years of age and over, and male young persons of 14 years of age and over. Three shifts, none of which may be longer than 10 hours, may be worked in each period of 24 hours, subject to the following conditions:

(1) Each worker shall have one break of 24 hours or more in every week, or of 32 hours or more in every alternate week, or of 40 hours or more in every third week.

(2) Each worker shall have an interval of two unemployed shifts between each two shifts of employment.

(3) An interval of not less than half an hour shall be allowed if the shift is 8 hours or less, and an interval of not less than one hour if the shift is more than 8 hours.

¹ Home office general order, Sept. 9, 1916, p. 1.

Provided that the superintending inspector of factories may authorize, subject to compliance with condition (1) and to such other conditions as he may impose, different arrangements as regards hours of work and breaks at the week end for the purpose of changing over the shifts.

SCHEME B. (TWO SHIFTS.)

This scheme applies to women and female young persons of 16 years of age and over and male young persons of 14 years of age and over, provided that the employment in the night shift of girls under 18 or boys under 16 years of age shall be subject in each case to the approval of the superintending inspector of factories. Two shifts of 12 hours each may be worked, subject to the following conditions:

(1) No person shall be employed more than 6 turns by day or more than 6 turns by night in any week.

(2) Unless otherwise sanctioned by the superintending inspector no person shall be employed on Sunday except in a night shift commencing on Sunday evening or ending on Sunday morning.

(3) The total hours worked per week (exclusive of mealtimes) shall not exceed 60, provided that in the case of male young persons 16 years of age and over the total hours worked per week (exclusive of mealtimes) may be 63.

(4) Intervals for meals amounting to not less than $1\frac{1}{2}$ hours shall be allowed in the course of each shift, of which in the case of the night shift one-fourth of an hour or more shall be allowed as a break within 4 hours of the end of the shift.

(5) Each worker shall have an interval of one unemployed shift between each two shifts of employment.

Providing that the superintending inspector may authorize, subject to such conditions as he may impose, a system of one long shift, not exceeding 13 hours with a corresponding reduction in the other shift, so that the *average* weekly total of hours shall not exceed the limits specified above in paragraph (3).

(Circular letter 198802 to accompany Home Office Order of Sept. 9, 1916.)

No requirement is laid down in the order that workers on the night shift shall change periodically to the day shift. The matter is left to the individual employers to determine in consultation with their work people. Care should be taken in selecting women and young persons for night work. They should not be put on night work indiscriminately * * *.

Home Office Order, Sept. 9, 1916, pp. 2, 3.

SCHEME C. (REARRANGEMENT OF STATUTORY HOURS.)

This scheme applies to women and female young persons of 16 years of age and over, and male young persons of 14 years of age and over.

In the case of such women and young persons, the hours of work and intervals for meals allowed by the [factory and workshop] act may be rearranged subject to the following conditions:

(a) The total hours worked per week (exclusive of intervals for meals) shall not exceed 60.

(b) The daily period of employment (including overtime and intervals for meals)—

(1) Shall not commence earlier than 6 a. m. or end later than 10 p. m.

(2) Shall not exceed 14 hours.

(c) Intervals for meals amounting to not less than $1\frac{1}{2}$ hours shall be allowed during the period of employment, with an additional half an hour if the period of employment is more than $13\frac{1}{2}$ hours.

(d) No overtime shall be worked on Saturday.

SCHEME D. (OVERTIME FOR BOYS.)

This scheme applies to male young persons of 16 years of age and over provided that the superintending inspector of factories shall have power in cases where the work is of a specially urgent character to extend the application of the scheme to male young persons between 14 and 16 years of age.

Such young persons may be employed overtime on *week days other than Saturday* subject to the following conditions:

(1) The total hours worked per week (exclusive of intervals for meals) shall not exceed 65.

(2) The daily period of employment (including overtime and intervals for meals)—

(a) Shall not commence earlier than 6 a. m. or end later than 10 p. m.

(b) Shall not exceed 14 hours.

Provided that where overtime is worked on not more than 3 days in the week the period of employment may in the case of boys of 16 years of age and over be 15 hours.

(3) Intervals for meals amounting to not less than $1\frac{1}{2}$ hours shall be allowed during the period of employment with an additional half hour if the period of employment is more than $13\frac{1}{2}$ hours, or an additional three-fourths of an hour if the period of employment is 15 hours.

(4) On Saturday the period of employment shall end not later than 2 p. m.

NAVAL SHIP REPAIRING WORK.

In cases of special emergency women, female young persons of 16 years of age and over, and male young persons of 14 years of age and over, employed on repair work for His Majesty's ships may be employed for special hours on any day of the week on the express instructions of the senior naval officer in charge and subject to such conditions as he may lay down as regards intervals for meals and rest; provided that in any case—

(1) No male young person over 16 years of age shall be employed for more than $67\frac{1}{2}$ hours in the week (exclusive of intervals for meals and rest).

(2) No other young person or woman shall be employed for more than 65 hours in the week (exclusive of intervals for meals and rest).

MISCELLANEOUS PROVISIONS.

No woman or young person shall be employed continuously at any time for more than five hours without an interval of at least half an hour, except that where not less than one hour is allowed

for dinner, an afternoon spell of six hours may be worked, with an interval of quarter of an hour only for tea, if the factory inspector is satisfied that adequate provision is made for the worker to obtain tea in the works and for tea to be actually ready for them as soon as they stop work.

If work commences before 8 a. m. and no interval is allowed for breakfast, an opportunity shall be given to take refreshment during the morning.

A woman or young person shall not be allowed to lift, carry, or move anything so heavy as to be likely to cause injury to the woman or young person.

Different schemes of employment may be adopted and different intervals for meals fixed for different sets of workers.

Employment on night shifts shall be subject to the provision, to the satisfaction of the factory inspector, of proper facilities for taking and cooking meals, and in the case of female workers, for their supervision by a welfare worker or a responsible forewoman.

Annual Report of Chief Inspector of Factories and Workshops for the Year 1916, April, 1917.

Page 7. Much that was abnormal and bound to be injurious to health if long continued has been brought within manageable limits. Excessive overtime and Sunday labor have been checked and as nearly as possible abolished, and night employment of girls under 18 has greatly decreased. As the inspection of controlled and other munition factories has progressed we find fewer factories working irregularly overtime or at night without sanction or regulation by an order. * * * The idea, once prevalent, that the factory act was in abeyance until the end of the war has gradually disappeared and very general compliance with the orders as regards hours of employment is found. While the latitude permitted by the orders has in some cases been exceeded, in other cases employers have voluntarily increased the length of the legal intervals.

Page 4. It is fairly well recognized now that continuous and excessive overtime very soon produces lassitude and slackness among the workers and injuriously affects efficiency and both the quality and quantity of work. In one weaving factory special records were kept when the normal hours of 55½ a week were increased for 16 weeks to 58 and for 4 weeks to 65½. The output did not increase in proportion and the difference was more marked when working the 65½ hour weeks.

The exemptions from school-attendance by-laws for agricultural work have offered a distinct problem. They have been granted by certain of the local education authorities without sanction in the provisions of the education laws. The Board of Education during the first year of the war approved the granting of such extralegal exemptions by the local authorities under specified conditions and in exceptional circumstances. The board stated in the spring of 1916 that exemptions had been granted too freely and emphasized the danger to the children involved in the situation. The board has, however, no direct control over the action of the local authorities,

except that in all cases where exemptions are granted, whether under the law or without the law, the money grant from the Board of Education to the local authorities is proportionately decreased. It is noteworthy that the practice of local authorities has not been uniform, and in some districts the pressure for the employment of children has been successfully resisted and extralegal exemptions have not been granted.

Board of Education. Correspondence relating to school attendance between the Board of Education and certain local education authorities since the outbreak of war, pp. 6, 7. (Letter of Aug. 21, 1914.)

The board think that, in the general interest of the nation, it is of the greatest importance that the public education of the country should be continued without interruption and with undiminished efficiency.

— *Annual Report for 1915 of the Chief Medical Officer of the Board of Education, p. 103.*

To withdraw the child from school at an earlier age than that contemplated by the attendance by-laws is to arrest his education on the threshold of the years when he is probably just commencing to assimilate and consolidate the instruction he has received and is receiving at school. His introduction to labor at this time renders him liable to conditions of strain detrimental to his physical well-being.

— *Annual Report for 1914 of the Chief Medical Officer of the Board of Education, pp. 224, 225.*

* * * The conditions which, in view of the Government, should be satisfied before a local education authority excused children from attendance at school for the purposes of agricultural employment (Circular 898 sent out in March, 1915):

(1) The employment of children of school age should be regarded as an exceptional measure permitted to meet a special emergency, and should only be allowed when the authority are satisfied that no other labor is available; and in no case should children be excused attendance at school if older children who are under no legal obligation to attend school are available.

(2) In considering the available supply of labor, the authority should satisfy themselves that all reasonable efforts have been made to secure adult labor, e. g., by application at the labor exchanges and especially by the offer of adequate remuneration.

(3) Every case should be considered on its merits, and there should be no general relaxation of by-laws.

(4) The employment should be of a light character and suitable to the capacity of the child.

(5) Permission, if given at all, should be given for a definitely limited period only.

— *Circular 943. Feb. 29, 1916.*

(a) Children under 12 years of age should never be excused unless the circumstances are entirely exceptional, and then only for very short periods.

(b) Persons desiring to employ in agriculture children liable to attend school should be asked to furnish particulars of the character

for which the labor is required. They should also be required to satisfy the authority that they have made adequate efforts, supported by the offer of reasonable wages, to secure the labor required in other directions, and more particularly by employing women.

(c) It is suggested that the urgency of the need for the labor of school children may to a certain extent be tested by the amount of the wages offered, and as a general rule it may be taken that if the labor of a boy of school age is not worth at least 6 shillings¹ a week to the farmer the benefit derived from the boy's employment is not sufficient to compensate for the loss involved by the interruption of the boy's education.

(d) A register should be kept of children exempted, and all exemptions should be reviewed at intervals not exceeding three months in order to ascertain that the conditions on which the exemption was granted still exist.

(e) It is important that the education committee should exercise direct control over the matter, that no general resolutions on the subject should be adopted by the county council until the views of the education committee have been carefully considered, as required by statute, and that the work of excusing individual children should be closely supervised by the education committee; it has been found that a policy of giving district committees an unfettered control in the matter, or of giving school-attendance officers or other persons a discretion to excuse children when they think fit, involves great divergency in practice and gives rise to considerable laxity of administration.

Although some local authorities resisted successfully the attempt to obtain general or wide exemptions from school-attendance laws, the result of allowing discretionary exemptions to these laws was an extensive exodus of children from schools into farm work.

Board of Education. Annual Report for 1915 of the Chief Medical Officer of the Board of Education, p. 103.

The board have already expressed their concern to local education authorities at the large number of exemptions which have been granted for agricultural employment, and have stated that in their view in some areas they have been granted too freely and without sufficiently careful ascertainment that the conditions of exemption prescribed by the Government, as indicated by the board's circular letter of 12th March, 1915, to local education authorities, were fulfilled.

— *School Attendance and Employment in Agriculture. Returns September, 1914, to January, 1915, p. 3.*

In 18 counties the exemptions have been confined to agricultural employment and in 12 the exemptions have covered other industries. The figures themselves show that 89 per cent of the exemptions have been for agricultural employment. The exemptions do not in most cases appear to have been granted for any definite period, but the replies indicate that the counties contemplate that the exemptions may be withdrawn should the conditions subject to which they were granted cease to exist. * * * In 19 counties it is stated that the exemptions have only been given where the employer has lost work-

¹ Six shillings equal \$1.46.

people by enlistment, and in other counties the exemptions have been confined to cases where the father or brother of the employed child has enlisted.

Board of Education. Annual Report for 1915 of the Chief Medical Officer of the Board of Education, p. 106.

Several authorities have during the past months passed resolutions in favor of exempting children under 12 years of age. On the other hand, a number of authorities have successfully resisted proposals for the release of such children.

Morning Post (London), Feb. 23, 1917.

In the annual report of the committee on wage-earning children alarm is expressed at the increasing demand for child labor, particularly in the agricultural districts; and the opinion is given out that the relaxation of the by-laws under the employment of children (1903) act is unjustifiable.

Board of Education. Annual Report for 1915 of the Chief Medical Officer of the Board of Education, p. 105.

Exemptions of school children from school attendance for agricultural employment. Returns furnished by local education authorities.

Number of children normally liable to attend school but excused from attendance for the purpose of agricultural employment:

Sept. 1, 1914 to Jan. 31, 1915.....	1,413
Feb. 1, 1915 to Apr. 30, 1915.....	3,811
On Jan. 31, 1916.....	8,026
On May 31, 1916.....	15,753
On Oct. 16, 1916 ¹	14,915

These are the numbers of exemptions granted. It does not represent the number of children permitted exemption at any one time since many children excused during the earlier period have since attained the age of 14 or are on other grounds legally exempt from liability to attend school; many children, excused for short periods only have since returned to school.

The number of children legally exempted from school for employment in agriculture under "Robson's Act" from September 1, 1913, to January 31, 1914, was 90. For the same period the next year the number was 96. These were the only children legally entitled to leave school.²

A number of children who would normally have remained in school have left school for employment. Besides those specially exempted for agricultural purposes these include children under 14 years of age legally exempted because they have fulfilled all educational requirements, and also children over 14.

— *Annual Report for 1914 of the Chief Medical Officer of the Board of Education, p. 227.*

In normal times many children who might obtain exemption from school under the by-laws so far as age, previous attendance, or quali-

¹ Board of Education, Summary of returns supplied by county local education authorities of children excused from school for employment in agriculture on Oct. 16, 1916.

² Board of Education, School Attendance and Employment in Agriculture, Summary of returns supplied by local education authorities for the period Sept. 1, 1914, to Jan. 31, 1915, p. 10.

fications are concerned do not in fact avail themselves of their opportunities [to go to work] and remain at school longer than they really need. I have no actual figures on the subject, but there is reason to suppose that at the present time, in view of the largely increased demand for juvenile labor, children are taking fuller advantage of the possibilities of exemption offered by the by-laws.

The children exempted from school for agricultural employment are not receiving high wages.

Board of Education. School Attendance and Employment in Agriculture. Returns 1st September, 1914 to 31st January, 1915, p. 3.

The wages vary considerably below a maximum of 7s.¹ a week, and it is difficult to ascertain the value of the remuneration given, owing to the fact that in many cases board and lodging are supplied. The following reply given in one county may be regarded as fairly typical:

2 at 6s., 1 at 5s. 6d., 9 at 5s., 5 at 4s. 6d., 6 at 4s., 1 at 3s. and meals, 1 at 2s. and meals, 1 lodged and boarded (no pay), 3 at nil (working for parents).

The employments entered have little value as preparation for future working life of children.

Leeson, Cecil, The Child and the War, p. 36.

If the lads were learning anything useful the situation, though still undesirable, would be not quite so bad; but they are not learning anything useful. Most of the factory work they do is "blind-alley" work, fitting them for nothing afterwards; and, to do it, lads are sacrificing physique, efficiency, and in many cases character.

Efforts have been made to find substitutes for the labor of children of school age in the labor of women and of young people and children legally exempt from school attendance.

Board of Education. Report for 1915 of the Chief Medical Officer of the Board of Education, p. 106.

The board of agriculture have expressed the opinion that if the women of the country districts and of England generally took the part they might take in agriculture, it would be quite unnecessary to sacrifice the children under 12.

Board of Trade Labor Gazette, Vol. 24, No. 2 (Feb. 1916), p. 43.

The board of trade in consultation with the board of agriculture are taking active steps to mobilize a sufficient supply of women for work on the land in order to meet the shortage of agricultural labor due to the enlistment of men in His Majesty's forces. The reserves of women's labor available for agriculture are to be found chiefly among the local unoccupied women in country villages, who have some experience of, or familiarity with, agricultural work, and also among the better educated women who are willing to be trained for the purpose.

¹ The shilling equals approximately 24 cents.

GREECE.

In October, 1915, a law was passed authorizing a suspension of the labor laws under definitely specified conditions in case of mobilization. What action has been taken under this act does not appear from the Bulletin of the International Labor Office.

Bulletin of the International Labor Office, Vol. XI, p. 52 (summarized in part).

The act of October 18/31, 1915 (No. 677), provided that in case of mobilization the laws "coming within the purview of the minister of national economy" and all decrees issued in pursuance of the same might be suspended by a royal decree, upon the proposal of the minister of national economy in accordance with a resolution of the ministerial council. Suspension of an act relating to the benefit associations and trade unions was also permitted. Before such decrees are published, however, an opinion on the suspension was to be obtained from the permanent committee to be elected by the members of the superior labor council. This committee was to be elected from among the members of the superior labor council and must contain at least one representative of the employers and one of the workers. If these elections had not taken place, the members of this committee might be appointed by the minister of national economy, provided that two members were chosen from among the employers' representatives on the labor council, and two from among the workers' representatives.

Any such suspension by royal decree should not apply for more than three months after demobilization, and might be revoked at any time by royal decree.

Several months earlier (Dec. 24, 1914/Jan. 6, 1915) the provisions concerning night work in bakeries had been suspended for fancy bakeries under specified conditions and for zwieback bakeries by special permission. This does not appear, however, to have been a war measure.¹

ITALY.

On August 30, 1914, a royal decree allowed suspensions of the night work prohibition for women and children under specified conditions, and in June, 1915, after Italy had entered the war, a decree of the lieutenant general suspended for the duration of the war educational requirements for sons of soldiers who were 12 years old and wished to go to work. The weekly rest law, without any war time amendment, permitted exemptions in case of force majeure or for work in the public interest;² these exemptions were frequent and seem to have been applied for without due cause.³

It has been intended that exceptional hours should be permitted only in carefully considered cases, and one of the duties of the medical

¹ Bulletin of the International Labor Office, Vol. XV (German edition), Nos. 1 and 2, p. 15.

² Law of July 7, 1907, No. 489, on Weekly Rest, Art. 3, par. c (Nuovo Codice del Lavoro, Prof. E. Nosedo, Milan, 1913, p. 418).

³ La Confederazione del Lavoro, Mar. 16-June 1, 1916, p. 435.

inspection of industry and labor, instituted in January, 1915, has been to give judgment on exemptions. On the other hand the budget and staff for factory inspection have been greatly reduced each year, although the police have to some extent supplemented the work of the few trained inspectors remaining.

Physicians and working men and the official advisory body, the *comitato permanente del lavoro*, have entered protests against the war exemptions, and the Government has referred frequently to the importance of safeguarding the health of women. In October, 1916, the central committee on industrial mobilization authorized the regional committees on industrial mobilization to prescribe standards of hours which would restore the safeguards of the labor law, but apparently this effected no immediate change, for several weeks later protests were again made by deputies and socialists. Definite measures have now been taken to secure obedience to the labor law in all auxiliary establishments.

Bolletino dell' Ufficio del Lavoro, Fortnightly Series, Sept. 16, 1914, p. 190, and Bulletin of the International Labor Office, Vol. X, p. 73 (summarized).

The royal decree of August 30, 1914, gives authority for the suspension of the existing prohibition of night work for women and children in the following cases, until further notice:

(1) Ministry for agriculture, industry, and commerce may suspend prohibition where necessary in regard to work carried on directly for the state or where other indispensable requirements of public interest make it necessary.

(2) Provincial prefects after hearing the competent district authority for industrial and labor inspection may suspend prohibition in event of force majeure, which causes an interruption of employment not to be foreseen and not recurring at regular intervals.

Bolletino dell' Ufficio del Lavoro, Fortnightly Series, Mar. 16, 1915, p. 72 and Bulletin of the International Labor Office, Vol. X, p. 146 (summarized).

A royal decree of March 7, 1915, providing for the manufacture of one kind of bread only, states (sec. 7) that the prefects shall see that where the necessity is recognized, derogations from the regulations in force, relating to night work for bakers and to Sunday and holiday rest shall be allowed.

Bolletino dell' Ufficio del Lavoro, Fortnightly Series, July 1, 1915, p. 16, and Bulletin of the International Labor Office, Vol. X, p. 244 (summarized).

Decree of the lieutenant general (No. 889, June 13, 1915) respecting derogations from the act relating to the work of women and children, in favor of the children of soldiers recalled to, or retained with, the colors.

This decree orders that the educational requirements for the employment of children be suspended in the case of children 12 to 15 years of age who are sons of soldiers, "without prejudice to the prescribed supplementary instruction." The authority issuing the book permitting the child to work must insert a note that it has been issued according to this decree.

In June, 1915, applications for suspension of night work prohibition were encouraged by a ministerial circular exempting them from the stamp tax.¹

Hints are not wanting of a breakdown of the labor law in matters not covered by the decrees cited or by previous laws, and it is stated by La Confederazione del Lavoro that the ministry permits exemptions "without even consulting the permanent committee on labor."²

Infractions of the law were no doubt encouraged by the reduction of the budget for factory inspection and by the absence of inspectors who had been called to the colors.

Italia, Camera dei Deputati, Previsione dell' Entrata e della Spesa, Budget Bills for 1914-15, 1915-16, 1916-17, p. 45 of each.

The item for factory inspection and special investigations (Statistica e Lavoro) in the budget of the ministry of agriculture, industry, and commerce, has been as follows:

	Lire.
Budget bill, 1914-15.....	160,000
Budget bill, 1915-16.....	97,000
Budget bill, 1916-17.....	58,200

"Social legislation on vacation" in *La Confederazione del Lavoro*, August 1, 1916, p. 494.

We, and those who with us have really cared for the legislative protection of the workers, have always deplored that the inspection of industry and labor was made up of an exceedingly scanty number of employees who were obliged to fulfill an infinite number of duties—study, investigations, etc.—and so were unable to develop the active work of enforcing the labor laws. Now, while the employees of the inspection ought—according to the law and the regulations relating to its application—to be 77, they have been reduced in consequence of the calling to the colors of so many to 17 thus assigned: One chief medical inspector; 3 district chiefs in place of 7; 4 inspectors instead of 23; 7 assistant inspectors where there should be 25; 2 junior clerks in place of 21. * * * Altogether the employees in the service are 22 per cent of the required number.

As early as September, 1914, the comitato permanente del lavoro urged that the standards of the labor law be so far as possible maintained by wise regulation of work and that exemptions be issued only with the utmost caution.³

It seems to have been in recognition of the danger of abrogating the safeguards of labor that the medical inspection of industry and labor was instituted in January, 1915, by the minister of agriculture, industry, and commerce, under the direction of Prof. Giovanni Loriga, with the collaboration of Prof. Luigi Carozzi, to apply hygienic

¹ Circular of June 30, 1915, No. 5538, referred to in Boll. dell' Ufficio del Lavoro, Fortnightly Series, July 1, 1915, p. 159.

² La Confederazione del Lavoro, Milan, Apr. 1, 1915, p. 93, and leaflets issued by the Group for Medical Propaganda in War Time, No. 9 in Il Lavoro July 31, 1915, p. 221.

³ Comitato Permanente del Lavoro, meeting of Sept. 10-11, 1914, "Order of the day" in Il Lavoro, Sept. 30, 1914, pp. 286-7.

and sanitary regulations, to give judgment on exemptions, etc., and to investigate sanitary and hygienic conditions of labor.¹

In July, 1915, the public-health experts of the group for medical propaganda in war times appealed to all good Italians in the name of patriotic duty to do all they could to mitigate the inevitably evil effects of the infractions of the labor law.

Leaflets issued by the Group for Medical Propaganda in War Time, No. 9, in Il Lavoro, July 31, 1915, p. 221 (extract summarized).

Women are now admitted to night work in certain industries. The evil effects of night work on the female organism are well known—the consequent predisposition to blood troubles and to diseases of the digestive and nervous systems. These women are serving the State; they should be safeguarded and supervised by committees.

Sons of soldiers called to the colors are admitted to work at 12 years of age, even if unprovided with the proper certificates of instruction. Records must be kept for their health and for school attendance after the war. Where here and there in small centers night work in bakeries has been permitted, the civic committees in cooperation with doctors must inform themselves how best to guard the workers' health.

The importance of safeguarding the health of women workers was recognized by the under secretary of arms and munitions in his second circular (Sept. 28, 1916) urging the substitution in munition plants of women and boys for men of military age.

Comitato Nazionale per il Munizionamento, Il Lavoro Femminile nella Industria di Guerra Italiana, January, 1917. (Quotations from circular of September 28, 1916, of the under secretary of arms and munitions.)

It is imperative to remove the obstacles to a larger employment of women. * * * An important aid will be the provisions now being worked out by the central committee on industrial mobilization for regulating wages, régime of work, and social and hygienic standards. * * *

It must never be admitted that women should be employed merely as an artifice to get work done at low wages for the sole benefit of the employer.

The recruitment of women for industrial work will be facilitated in proportion to the provision of means to safeguard their morals, particularly in those transitory cases where it is necessary, owing to the exigencies of the time, to employ women on night work. * * *

Compliance with the laws made to insure decency, health, and safety from accidents—important as it is in normal times—is now more than ever necessary. * * * As soon as manufacturers show initiative and * * * adaptiveness for this new type of labor and cease to cherish preconceived opinions as to the inferiority of women's work and as to the low wages that it merits, the labor of women will respond splendidly to the utmost variety of demands.

¹ Circular of Feb. 1, 1915, of the Minister of Agriculture, Industry, and Commerce to the Prefects of the Realm in *Il Lavoro*, Feb. 26, 1915.

An urgent demand that former labor standards be restored was made in the autumn of 1916 in a memorial to the Government drawn up by the federation of labor. Like resolutions were passed by the federation of metal workers, by the Socialist deputies, by the council general of the chamber of labor in Milan, by the general legislative council of that body, by the national women's union, and the Cassa di Maternita.¹

La Confederazione del Lavoro, October 1, 1916, p. 523.

In conclusion * * * we ask:

(1) That, as regards hours of labor, the laws on women's and children's labor and on Sunday rest should be restored to full vigor, together with the proper standards of hygiene required by the exceptional conditions.

(2) That for women and boys up to 18 years the following maximum hours should be fixed:

(a) For day's work, 10 hours, with 2 hours' rest;

(b) For work in two shifts: For the night shift, 9 hours' work with 2 hours' rest, with urgent recommendation to arrange three 8-hour shifts, broken by at least one-half hour's rest; to employ male workers by preference for night work; and to try, in day work for women alone, to arrange 5-hour shifts.

(3) That the labor inspection should be restored to full force. * * *

The standards demanded in (2) a. are higher than those in effect before the war.

The under secretary of arms and munitions, Dallolio, stated in the chamber of deputies on December 15, 1916, in reply to a protest by the Socialist leader, Truati, that the central committee on industrial mobilization had devoted special attention to the problems of the female labor force in munition works and had drawn up standards to be adhered to by the regional committees of mobilization.² These standards had been discussed and voted in the meeting of October 6-7, 1916, but had not been given to the public. They were, however, reported to the *Confederazione del Lavoro* by a member of the committee and published in that organ.

La Confederazione del Lavoro, November 1, 1916, p. 559 (summarized).

The question of the labor of women in the mobilized industries was presented in a speech which referred to the concern of the under secretary of arms and munitions both as to direct means of increasing the number of women in the production of munitions and as to the renewed consideration of the moral and physical health of the workers now employed and to be employed. It brought forward resolutions passed by the permanent committee on labor, by labor organizations, by the national women's unions, and the Maternity Insurance Co., of Milan. After long discussion the committee passed a series of resolutions which include the following sections:

¹ Bollettino dell' Ufficio del Lavoro, Nov. 16, 1916, p. 171.

² Bollettino dell' Ufficio del Lavoro, Jan. 1, 1917, p. 7.

(1) *In the matter of hours:* The regional committees are authorized to prescribe (with power of appeal to the central committee) standards limiting the working day for women and children and regulating rest periods in such manner as to restore the safeguards of the old law.

(2) *In the matter of wages:* The regional committees shall see to it that wages shall be fixed for the period of apprenticeship for women and children and that this period shall be limited.

(3) *In the matter of hygiene and morals:* That the regulations of the regional committees aiming to enforce the standards indicated by the under secretary of arms and munitions on the employment of women in munition works * * * shall have an obligatory character.

(4) *In the matter of inspection:* That independently of the exemptions asked by the minister of industry, commerce, and labor, and the federation of labor, the employees of the labor inspection called to the colors and not adapted, or less adapted than others, to the strain of war shall pass into the direct control of the undersecretariate of arms and munitions which will organize the inspection of mobilized factories and coordinate the work of the said soldiers with that of the other labor inspectors. * * *

The writer states that arrangements are in progress between the under secretariate of arms and munitions and the ministry of industry, commerce, and labor to limit exactly their respective fields of action in the matter of inspection, and that the other requests formulated in the resolutions will take effect at once after the meeting of the central committee of industrial mobilization at which the minutes of the meeting of October 6-7 are approved.

In February, the under secretariate of arms and munitions ordered the restoration of the weekly rest day in establishments working for the national defense except in special cases for which individual permits might be secured. And in March the under secretary Dallolio, in reply to a question from a Socialist deputy gave emphatic assurance that the conditions of labor in munitions plants were matters of deepest concern to the Government.

Bolletino dell' Ufficio del Lavoro, Fortnightly Series, March 16, 1917, pp. 51, 52.

Circular of February 24, 1917, of the under secretariate of arms and munitions on the restoration of the weekly rest day in establishments working for national defense:

Referring to the considerations contained in the circular of December 16, 1916, No. 224783 of this under secretariate, and bearing in mind the answers sent by the regional committees on industrial mobilization and the opinion given at various times by the competent office of the ministry of industry, commerce, and labor, the timeliness now seems beyond dispute of restoring * * * the weekly rest of an entire day, since, now that industry has passed through the period of feverish adjustment that characterized the second half of 1915 and a large part of 1916, such a provision while not diminishing the intensity of production will indubitably aid in maintaining the health of the workers and so aid continuity of production.

Taking into account however, the propriety of leaving some liberty of action to the regional committees because of the diversity of con-

ditions in different factories and districts, the under secretariate decides as follows:

1. From March 15 next all authorizations of Sunday and holiday work, granted beyond existing provisions of the labor law shall be canceled with the exception of absolutely exceptional cases, which the regional committees in agreement with the committee of standards for artillery (Commissione di Cellaudò di Artiglieria) believe necessary to continue.

2. As it is impossible to exclude absolutely the possibility that in some establishments the need may still be proved of a very brief use of Sunday and holiday work, it remains established that for the plants now having authorization for Sunday and holiday work (annulled by the present circular) such very brief use of it may be in future directly authorized time by time by the same committee who will keep note of such authorizations and communicate them every two months * * * to the central committee.

The restoration of Sunday rest will of course be subordinate to the prescriptions of circular of January 8, 1917, No. 352739, in regard to the substitution of shifts of rest for Sunday rest, and the displacement and reduction of the hours of service of the industries, and it is not the purpose of the present circular to establish for industries of continuous processes any different regulation than that of the legislative provisions now in force.

Bolletino dell' Ufficio del Lavoro, March 16, 1917, pp. 49, 50.

Report of the Chamber of Deputies, session of March 14, 1917:

Gen. Dallolio in answer to the Honorable Turati set forth provisions adopted and efforts made for the protection of women and children in auxiliary establishments and for a more rational organization of employment at present and after the war, and assured the Chamber that these problems of social order were the deep concern of the Government and formed the object of his most constant care. * * *

In this connection he was glad to express the most lively encomium on the patriotic zeal shown by the women workers of the auxiliary establishments and gave assurance that the Government had but one object (in the matter)—so to act that the workers in the auxiliary establishments should labor with zeal and satisfaction to provide the country with the means necessary for its defense.

A decree of March 15, 1917, extended the powers of the regional committees to establishments not auxiliary, if their work concerned the production of arms and munitions. The committees could prescribe limitations of hours of work; inspection service for hygiene and sanitation was to be organized.

In accordance with this decree regulations were issued in April by the under secretariate of arms and munitions. These regulations limited the working hours of women and young persons to 60 a week "since the excessive prolonging of the hours of labor * * * is in the end of more disadvantage than advantage to production." They also forbade the employment on night shifts of children under 18 and, except in absolutely exceptional cases, required the

granting of one day's rest in seven. These regulations do more than reestablish prewar labor standards; in some respects the standards are even higher than those demanded before Italy entered the struggle.

Decree of the lieutenant-general, March 15, 1917, No. 570, establishing new rules in addition to the regulations for industrial mobilization, in Bollettino dell' Ufficio del Lavoro, Fortnightly Series, June 1, 1917, pp. 96, 97.

CHAPTER VI.

ART. 31. The regional committees have power to prescribe limitations of hours, and rest periods in the establishments under their jurisdiction.

ART. 32. It is within the powers of the regional committees to issue directions for the hygienic protection of the labor force, and especially of women and children.

ART. 35. The powers conferred on the regional committees by the present chapter are extended for the duration of the war to the establishments not auxiliary whose work concerns the production of arms and munitions.

CHAPTER VII.

ART. 36. Under the ministry of war, under secretariate of arms and munitions, an inspection service is organized for hygiene and sanitation in auxiliary establishments.

ART. 37. The purpose of said service is to * * * aid the agencies of industrial mobilization in the prescription and application of rules for the protection of the health of the workers.

Circular No. 409813 (Apr. 30, 1917) of the under secretariate of arms and munitions for the protection of the labor force of women and young persons in Bollettino dell' Ufficio del Lavoro, Fortnightly Series, June 1, 1917, pp. 97, 98.

It is the chief purpose of this under secretariate that the existing laws for the protection of labor, and especially those on the labor of women and children and on the national maternity insurance, should always be observed in the establishments under the jurisdiction of the committees.

With due regard, moreover, to the special nature of the heavy labor involved in the making of munitions, and to the unusual fatigue to which the women and young persons employed may be subjected in this period of intensive production, it is considered necessary that, for the execution of the new provisions made in the decree of March 15, 1917, No. 570, the following regulations should be observed:

Since the excessive prolonging of the hours of labor, if done in normal times, is in the end of more disadvantage than advantage to production, especially when it is a question of a labor force of women and young persons, the working hours of women of whatever age and of children must not as a rule exceed 60 hours per week.

Women under 18 and children must not be permitted to work on night shifts, and on these shifts the hours of labor must not exceed 10 for women.

With the circular of February 24, 1917, No. 317764, this under secretariate restored the requirement of weekly rest for an entire day. We reaffirm on this occasion that exceptions to this provision shall be permitted only in absolutely exceptional cases.

The frequent tendency to reduce rest periods overmuch must be resisted with energy, especially in the night shifts. * * *

It is recommended that even adults, before their admission into the plants, be subjected to medical examination with the double purpose of determining their physical fitness and of avoiding spread of disease, such provision being made necessary for adult women who are not obliged to present employment books, by reason of their inferior physical resistance.

The employment of pregnant women is forbidden during the last month of pregnancy and for the first month after the birth.

NETHERLANDS.

Much of the country was placed under martial law¹ at the outbreak of the war and this empowered the military authority to order the suspension among other laws of the general labor act (*Arbeidswet*), the safety act (*Veiligheidswet*), and the laws regulating dangerous and unhealthy trades (*Hinderwet*) as authorized by the martial law act of May 23, 1899 (*Staatsblad*, 1899, No. 128). The military commanders granted temporary exemptions to limits of hours in some plants running on war orders and permitted night work in three textile mills. All these exemptions on war orders had expired or were canceled by November 1, 1915, except one which ran until December 1, 1915.

Centraal Verslag der Arbeidsinspectie in het Koninkrijk der Nederlanden over 1915, pp. 82 and 83 (summarized).

In a certain lace and trimming factory the owner after promising to arrange no longer shifts than from 7 a. m. till 9 p. m. continued regularly until 10 p. m. or even 1 a. m. Thereupon the commander ruled that "female persons" may work only between 7 a. m. and 9 p. m. and the men between 6 a. m. and 9 p. m., and that a rest of at least two hours during this period should be allowed.

[According to the labor law of 1911, art. 6, young persons and women may not work in an industrial plant more than 10 hours a day nor 58 hours a week, nor between 7 p. m. and 6 a. m.]

A quite different character had the suspension of the labor law in three textile mills at the end of 1915 and in the beginning of 1916. There were in Twente hundreds of unemployed textile laborers who had worked in Germany before the war. In order to give them employment arrangements in two shifts were made by the manufacturers in two places without going beyond the limits of the labor law. In a third town, however, the manufacturers objected, declaring that they could not employ a second shift during the legal hours; so the labor law regarding night shifts was suspended.

RUSSIA.

Not until March 9/22, 1915, did Russia provide for any emergency exemptions from the labor laws protecting women and children. On this date the Tsar, in accordance with a resolution of the

¹ Decree of Aug. 10, 1914 (*Staatsblad* No. 406), Law of Oct. 16, 1914 (*Staatsblad* No. 491), and other decrees.

ministerial council, issued a decree, "temporarily to amend and supplement the legal provisions in question [concerning night and underground work by women and by young persons under 15 years in coal mines] until the conclusion of warlike operations."

*Bulletin International Labor Office, Vol. X, p. 381.*¹

Persons of the female sex and such young persons of the male sex as have not reached the age of 15 years shall be admitted to work at night and underground in the coal mines of European Russia, subject to the observance of the following rules:

(1) Young male persons shall not be employed in underground work in the daytime for a period exceeding 8 hours, or at night exceeding 6 hours, in 24, subject to the condition that in the course of the working day following after night work young persons shall not be readmitted to work for a period of 12 hours from the cessation of such night work.

(2) Persons of the female sex having been employed at night shall not be employed again earlier than midday on the day following the night work.

(3) Persons of the female sex and young male persons shall only be admitted to night and underground work on condition that they are first shown, by an examination undertaken for the purpose by the mines medical officer, or where there is no such person, by the rural or municipal medical officer, to be suited, from the point of view of their strength and health, for the said work. And—

(4) It shall rest with the local mining authorities, in agreement with the governors concerned, to issue special lists of processes in which persons of the female sex and young persons may be employed.

On October 19/November 1, 1915, an imperial decree provided for the granting of special exemptions to the laws regulating the hours of women and young persons in factories working for the national defense. It does not permit the employment of children below the legal age limit.²

Collection of working regulations issued in accordance with article 87 of the fundamental laws of the Russian Empire. Third supplement to the collection issued in the year 1913, Petrograd, 1916, pp. 166, 167.

The imperial decree of October 19, 1915:

The minister of commerce and industry is given the authority to permit to factories, mills, and establishments connected with mining and subsequent processes producing articles necessary for State defense, exemptions from articles 64, 65, 68, 74, 75, and 194–200 of the statute on industrial work regulating the work of women and persons under 17 years of age, the length of the working day, and distribution of hours in the above establishments, by issuing special rules.

[Articles 64–65, 68, 74, 75, and 194–200 of the statute on industrial work regulate the hours of women and young persons 12 to 15 and

¹ The original law is given in the collection of working regulations issued in accordance with article 87 of the fundamental laws of the Russian Empire: Second supplement to the collection issued in the year 1913, Petrograd, 1915, p. 39.

² The London Times of June 16, 1917, states that "Female children's night work has been abolished in Russia." No other information on this point has been received.

15 to 17 years of age; forbid night work and Sunday work to the above workers, with certain exceptions; and provide schedules of hours and holidays for all employees.]

No information is available about the administration of these exemptions or the frequency with which they were granted. The only note of protest against child-labor conditions is found in a conference on the care of children where legislative measures were discussed and it was considered desirable to raise the age limit for factory work from 12 to 14 years, to reduce the maximum hours for children ¹ to 6 per day, and to prohibit night work and factory work detrimental to the health of children.²

SWITZERLAND.

Under the authority of the general emergency decree of August 3, 1914, the Federal Council on August 11, 1914, stated that derogations from the labor laws affecting women and children might be permitted in special cases where this is the sole means of enabling work to continue.

Recueil Officiel des Lois et Ordonnances de la Confédération Suisse, N. S. Vol. XXX, 1915, p. 347 (summarized).

The Federal order of August 3, 1914, is a general proclamation on neutrality and measures of security. The Federal Assembly gives unlimited power to the Federal Council for the taking of all measures necessary for the maintenance of the security, integrity, and neutrality of Switzerland, for the safeguarding of the credit and economic interests of the country, and in particular of the people's food supply.

Bulletin of the International Labor Office, Vol. X.

Page 75. Circular letter from the Federal Council to all the Cantonal governments on August 11, 1914, relating to the temporary authorization of exemptions from the factory act, says in part:

In pursuance of section 3 of the Federal decree of August 3, 1914, we therefore authorize you to allow factories to introduce, during the continuance of the present conditions, a system of working which derogates from the provisions of the factory act, more especially as regards working hours, night and Sunday work, and the employment of women and young persons.

This authority shall apply to cases where this is the only possible way of continuing the work.

The orders of the competent Federal authorities shall apply to the factories of the Confederation.

Page 76. Circular letter from the Swiss industrial department to all the Cantonal governments, on August 29, 1914, relating to the temporary authorization of exemptions from the factory act, says in part:

The circular letter of August 11, 1914, * * * does not seem to have been everywhere correctly understood.

¹ Age not given; probably up to 15 years, as the present law allows an 8-hour day for persons 12 to 15 years old.

² *Russkila Viedomosti*, Mar. 21/Apr. 3, 1916.

We therefore find ourselves compelled to emphasize the point that, in virtue of the decree referred to, exemptions from the factory act are only allowed if they are sanctioned by you, and that such authorizations are only to be granted if this is the sole means of enabling an undertaking to continue working. It refers more especially to those cases when it is impossible to replace absent skilled workers. * * * Exemptions from the factory act shall be refused to factory owners who are able to keep their undertakings in operation, and even to meet exceptional orders, by engaging unemployed workers. * * *

In November and December, 1915, the Federal authorities specified in detail the exemptions which might be allowed by the Cantonal governments or by the district or local authorities. They do not include permits for night work by girls under 18 years of age and boys under 16, for Sunday work by women and young persons, or for the employment of children under 14 years old. Whether such exemptions had been granted under the earlier orders is not clear from the terms of the November circular.

Bulletin of the International Labor Office, Vol. X, pp. 384, 386 (summarized).

A Federal resolution and a circular of the Federal Council to all Cantonal governments were both issued on November 16, 1915, on "permission to organize work in an exceptional manner in factories." The circular states in part:

"As we have been able to ascertain from the reports of the factory inspectors, the Cantonal governments have allowed exemptions from the act * * *. Not only when, as we said, the undertaking could be continued only by this means. * * * We rely on the perspicuity and uprightness of the Cantonal governments and their officials to see that permission to work in a manner contrary to the ordinary conditions of work shall only be given when this is absolutely necessary and unavoidable. It would be well also to examine the reasons for the applications closely and to inquire into the possibility of satisfying requirements by different means. In this connection care should be taken in particular, not to allow overtime in cases where the necessary production might be secured by taking on further available workers."

The exemptions which may be granted to factories collectively in pursuance of the factory act by the Cantonal governments or by the district or local authorities are:

(a) The extension of the 11-hour working day on not more than 80 days annually by not more than 2 hours a day for persons of both sexes over 16 years of age.¹

(b) The extension of hours of work annually on not more than 12 days preceding Sundays and holidays (9 hours only permitted by factory law).

(c) Work on not more than 30 nights annually for men 18 years of age and over but in no case for women.²

¹ Federal law on factory work of Mar. 23, 1877, in *Recueil Officiel des Lois et Ordonnances de la Confédération Suisse*, N. S. Vol. III, 1879, p. 224, ff. Secs. 11, 15, 16.

² *Ibid.*, secs. 13, 16.

(d) Work on not more than 12 Sundays annually for men 18 years of age and over but in no case for women.¹

In these cases the Cantonal governments may require payment of 25 per cent additional wages for this overtime work.

The exemptions which may be granted by the Cantonal governments to individual factories are:

(a) To employ women over 18 and male persons over 16 at night.

(b) To organize work in shifts and work without interruption by day (this system with moderate hours is preferred to allowing overtime to an excessive degree).²

(c) To reduce the midday break to less than one hour.

(d) To extend overtime, Sunday, and night work beyond the limits specified in the exemptions allowed to factories collectively.

In these cases the payment of 25 per cent additional wages is required for all overtime work and 50 per cent additional for all night or Sunday work.

The Federal factory inspector is to be notified of all exemptions allowed and the department may revoke or limit exemptions. Current exemptions contrary to these provisions must be brought into conformity with them by December 15, 1915, or withdrawn altogether.

Bulletin of the International Labor Office, Vol. XI, p. 54 (summarized).

A Federal resolution and a circular of the Swiss department of national economy to all Cantonal governments, on December 6, 1915, are concerned with the same subject. They replace the provisions concerning payment for overtime by the requirement that 25 per cent increase shall be paid for all overtime, Sunday, or night work. The circular states again that no permits should be issued where they might restrict the possibility of other workers securing employment.

The only protest against the granting of exemptions referred to in the official circulars is a petition from the Swiss Federation of Trade Unions, mentioned in the circular of December 6, 1915, which urges that "even during the war, deviations from the provisions of the existing factory act should not be allowed in any case." The Government asks the Cantonal governments to report in February, 1916, on the enforcement of the resolution of November, 1915, and to state whether its retention is still needed. Organizations of employers and workers will also be requested to express their opinions on this point.³

¹ Federal law on factory work of Mar. 23, 1877, in *Recueil Officiel des Lois et Ordonnances de la Confédération Suisse*, N. S. Vol. III, 1879, p. 224, ff. Secs. 15, 16.

² Circular of the Swiss Federal Council to all Cantonal governments respecting permission to organize work in an exceptional manner in factories, dated Nov. 16, 1915. *Bulletin of the International Labor Office*, 1915, Vol. X, p. 387.

³ *Bulletin of the International Labor Office*, Vol. XI, p. 56.

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**U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU**

JULIA C. LATHROP, Chief

**GOVERNMENTAL PROVISIONS IN THE
UNITED STATES AND FOREIGN COUN-
TRIES FOR MEMBERS OF THE MILITARY
FORCES AND THEIR DEPENDENTS**

**PREPARED UNDER THE DIRECTION OF
CAPT. S. HERBERT WOLFE, Q. M., U. S. R.
DETAILED BY THE SECRETARY OF WAR**

MISCELLANEOUS SERIES No. 11

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LETTER OF TRANSMITTAL.

AUGUST 29, 1917.

SIR: Immediately upon the declaration of war by the United States the Children's Bureau began a study of child welfare in the warring countries based upon such material as could be secured by correspondence or as was available in American libraries. A corps of readers and translators is examining the official records, parliamentary debates, newspaper reports, and current literature available for Great Britain and her colonies, Austria, France, Germany, Italy, Russia, and also for Switzerland and the Netherlands.

Four principal lines of study are pursued: (a) Child labor and school exemptions; (b) infant and maternity care; (c) delinquency; and (d) dependency. The relation of all these questions to the living conditions behind the lines is clear. It is also plain that the living conditions in large measure depend upon the provisions made by the respective governments for soldiers and their dependents. And since the withdrawal of men from the ordinary walks of life to form a large army must create similar problems here, the question of what countries offer important suggestions for a system of soldiers' compensation in this country becomes at once basic to the consideration of child welfare in war time.

It was found that Canada had worked out a system for the care of soldiers and their dependents in a way to be of particular practical interest to the United States. Accordingly it was thought best to make a special study of the care of soldiers and their dependents in Canada, and the bureau was fortunate enough to secure the generous assistance of Mr. (now Capt.) S. Herbert Wolfe, a well-known actuary, of New York City. Capt. Wolfe went to Canada and made the report on the care of dependents of enlisted men in Canada which was submitted to you on May 26 and which, as was then pointed out, embodies elements which have not thus far been brought together in a complete plan, but which, properly developed in a well-considered governmental scheme, seem to offer reasonable means for securing the economic status of the soldier and his family at home.

Upon submission to you of Capt. Wolfe's report on the care of dependents of enlisted men in Canada you at once requested him to direct the preparation of a further pamphlet showing the legal provisions now existing in the United States for the benefit of the mem-

bers of the military forces and their families. This Capt. Wolfe has done, and the result is found in the accompanying report entitled Governmental Provisions in the United States and Foreign Countries for Members of the Military Forces and their Dependents, which includes a review of the pension situation in the United States, a brief analysis of provisions peculiar to foreign countries, and comparative charts of rates in the United States and 12 other countries. In addition the systems of the United States and all the foreign countries except Canada are presented in detail.

The material contained in the accompanying report, together with the report upon the care of dependents of enlisted men in Canada, has been already utilized in drafting a proposed measure for soldiers' compensation in the United States by the Hon. Julian W. Mack, chairman of a special committee appointed by the committee on labor of the Council of National Defense for that purpose.

The bureau desires to express its great obligation to Capt. Wolfe for his invaluable services in planning and directing the report; it is also indebted to the various departments of the Government which have made available much indispensable information. Miss Anna Rochester has been in charge of the report and has had the assistance of Miss Mary D. Hopkins and the following other persons: Miss Marguerite D. Darkow, Miss Lulu L. Eckman, Miss Edith Rockwell Hall, Miss Anna Kalet, Mr. L. Magnusson, Miss Louise Moore, Miss Judith Bernays, Miss Louise F. Brown, and Mrs. Marie Francke Smith.

This report has been prepared under great pressure, and in view of the desire for early publication certain irregularities in the form of tables have been allowed to remain.

Respectfully submitted.

JULIA C. LATHROP, *Chief.*

Hon. WILLIAM B. WILSON,
Secretary of Labor.

GOVERNMENTAL PROVISIONS IN THE UNITED STATES AND FOREIGN COUNTRIES FOR MEMBERS OF THE MILITARY FORCES AND THEIR DEPENDENTS.

INTRODUCTION.

The CHIEF OF THE CHILDREN'S BUREAU.

MADAM: In accordance with the suggestion of Secretary Wilson, made upon the completion of the study of the Care of Dependents of Enlisted Men in Canada, the following compilation has been prepared showing existing provisions for soldiers and their dependents in the United States and the following foreign countries: Australia, Austria, France, Germany, Great Britain, Italy, Netherlands, New Zealand, Russia, South Africa, and Switzerland. The subject is of particular interest at this time, for it will be the part of wisdom to prepare at this date for the conditions which we know will have to be met in the near future. Our present pension laws are confessedly inadequate to meet the situation which has been developed by the present war, and the great interest of our people in this subject is indicated by the large number of relief measures and suggestions which have made their appearance in various parts of the country.

While the general scope of the inquiry was suggested by me, and from time to time I have supervised the preparation of the material, it is but proper to call your attention to the fact that the greater part of the work has been performed by members of the staff of the Children's Bureau, and credit is due to Miss Anna Rochester and her assistants for the preparation of this report.

It was felt that wherever possible an analysis should be made of the historical facts which would supplement the charts and tables. The work of obtaining the material for this report began in connection with a general study of child welfare in belligerent countries which was being made by the Children's Bureau because it was evident that the provision which a country makes or fails to make for the wives and children of its soldiers and sailors during the war is a fundamental influence in children's welfare. To the provisions for separation allowances have been added for the present report the provisions for the widows and children of men killed in battle and the provisions for disabled men. A brief review of the American pension system was then undertaken, but it soon

appeared that the subject justified the detailed treatment here presented. The provisions in foreign countries are presented as they are now so far as it has been possible to secure reliable information. It was felt that the inclusion of additional countries would make this report too cumbersome without enabling us to obtain any information which would be of value in the solution of the problem confronting us. In the tables it has been deemed advisable to show the payments not only in the monetary unit of the several countries but also, in parentheses, the equivalent in dollars and cents. For the purpose of conversion the "Table of values" of foreign countries issued by the Treasury Department has been used. The equivalents are as follows:

Country.	Monetary unit.	Value in United States money.
Austria.....	Krone.....	\$0. 2026
France.....	Franc.....	. 1930
Germany.....	Mark.....	. 2382
Great Britain and colonies.....	Pound sterling.....	4. 8665
Italy.....	Lira.....	. 1930
Netherlands.....	Florin.....	. 4020
Russia.....	Ruble.....	. 5146
Switzerland.....	Franc.....	. 1930

It was realized of course that the present values are not those given, but for obvious reasons it was deemed advisable to use a rate which was not subject to frequent fluctuation. It is felt, however, that attention must be called to the difference in the purchasing value of money in the various countries, and that factor should be taken into account when attempting to relate the benefits of one country to those of another.

The chapter following the analysis of pensions in the United States which shows the tendencies in foreign pension legislation is not only of historical interest but has a deeper significance in that it crystallizes in concrete form the results of the study of the various problems which have confronted the nations at war in dealing with the care of the soldier and his dependents. While in this country the details must necessarily be changed, we can not escape the basic obligations which other countries have been forced to meet. It raises certain issues for which this country will have to be prepared.

In foreign countries eminent experts in all branches of medicine, philanthropy, and social service have given their best thoughts to the solution of questions which up to this time have had for us only an academic interest. Our entrance into the war will carry with it similar problems, and we must be prepared to find solutions for them. It would be a short-sighted policy for us to disregard the investigations that have been made in other countries and we must not be con-

tent with any form of pension, disability allowances, or relief measures which are not based upon the most advanced and liberal ideas.

In order that the provisions of the various countries on any particular form of benefit might be brought together for comparative purposes, schedules have been prepared (see pp. 28, 31, and 32) which show the different rates awarded for the same contingencies in the different localities; it must be remembered, however, that a comparative schedule of this kind can deal with only one phase of a subject which has many modifications and that limitations must constantly be borne in mind lest an incorrect idea of the subject be obtained.

It is but proper that I should direct your attention to the great assistance which has been afforded the investigators not only by the various departments of our own Government but by the representatives of certain foreign governments. Invaluable aid was given by the officials of the Pension Bureau and of the Library of Congress, who spared no effort to assist in the location of the necessary material. To all of these sources are due most earnest thanks, and without their assistance it is safe to say that this investigation would have lacked much of its completeness.

S. HERBERT WOLFE.

PENSIONS IN THE UNITED STATES.

Three types of provisions are made for men who have served in the Army or Navy of the United States and for their dependents:

A. The retirement systems of the Army, Navy, Marine Corps, and Coast Guard provide with certain marked limitations for officers and men of the Regular Establishment. Except in the Coast Guard no allowance is made for an enlisted man who has served less than 30 years. No allowance for widows and children of either officers or enlisted men who are killed in the service is made beyond a death gratuity. This is usually equivalent to six months' pay of the deceased, although it rises to one year's pay if he has died in aviation service and to two years' pay for the widow of an officer or man in the Coast Guard.

B. The general pension laws administered by the Pension Bureau of the Department of the Interior provide for military and naval officers disabled in the Federal service who are not part of the Regular Establishment and therefore not eligible for retirement, for enlisted men who are disabled in the Federal service, and for the widows and children and certain other dependents of officers and enlisted men who are killed in the Federal service, except that widows of officers and enlisted men in the Coast Guard are not eligible for pension.

C. Service pension laws, also administered by the Pension Bureau, provide for men who have served in specified wars for specific periods, and for their widows and children, without reference to any disability incurred in the service or to the cause of the death. These include the War of 1812, the War with Mexico, various Indian wars, and the Civil War, and the required length of service varies in the different laws from participation in a single battle to service of 90 days or more. Women nurses who served in the Civil War are eligible to pensions after six months' service.

A. ARMY AND NAVY RETIREMENT.

Officers and enlisted men of the Regular Establishment are retired with three-fourths of their active pay. Members of the Officers' Reserve Corps and of the federalized National Guard are not eligible to retirement. Enlisted men, including noncommissioned officers in the Army and Marine Corps and petty officers in the Navy, are eligible to retirement only after 30 years of service. In the Coast Guard enlisted men who have served less than 30 years may be retired for disability in the service.

Officers, on the other hand, in any branch of the Regular Establishment may be retired for physical disability incident to duty without regard to the length of their service. They may, at the discretion of certain authorities, be placed on the retired list because of physical disability not traceable to the service, but for such disability they are usually "wholly retired" with one year's pay.

Physicians and enlisted members of the Medical Corps of the Regular Army are on the same basis as officers and enlisted men, respectively, of the Regular Army. The physician is eligible to retirement in case of disability incurred in the line of duty. The enlisted man can be retired only after 30 years of service; for disability incurred in line of duty before that time he may receive a pension.

Retirement pay depends solely upon the active pay the officer or enlisted man was receiving, and it does not vary according to the nature and extent of the disability. For the Army officer who is retired in good health upon his own application after 30 years of service, the officer who is automatically retired at 64 years of age, and the officer who is so seriously disabled in battle that for the remainder of his life he requires the constant care of an attendant, the retirement pay is reckoned on identically the same basis, with one exception: For the Army officer below the rank of brigadier general who is disabled in battle the retired pay is increased slightly as years go by, on the basis of the increases for length of active service which are allowed to his rank.

The death gratuity to the widow or other person designated by the officer or enlisted man of the Army, Navy, or Marine Corps, is granted only on behalf of a man who dies while on the active list. No gratuity is paid to the widow or heirs of either an officer or an enlisted man upon the retired list. The usual gratuity amounts to six months' pay of the deceased, but this is doubled if the death is due to an aviation accident in line of duty.

In the Coast Guard the death gratuity is paid to the widow, or to the child or children under 16 years of age, or to the dependent mother of the deceased. It is granted not only if he has died in active service but if his death is the result of wound, injury, or disease incurred in the service. The gratuity amounts to full pay for two years from the date of death.

No officer or enlisted man who is on the active or the retired list is eligible for a pension. But the widow or other person who receives a death gratuity is not deprived of right to a pension if she is otherwise eligible. It should be noted that the members of the Coast Guard and their widows are in no case eligible to a pension.

Two apparent exceptions to this general rule that persons receiving retirement pay are not eligible to a pension are found in the

following provisions for enlisted men, which are administered by the Army or the Navy although the actual payment is made through the Pension Bureau. Any man who has seen war service in the Army, Navy, or Marine Corps and has been awarded a medal of honor for distinguished gallantry in the face of the enemy receives, when he attains the age of 65 years, \$10 monthly for the remainder of his life in addition to any other pay or pension.

The second exception applies to enlisted men in the Navy or Marine Corps and allows to a man who has served 20 years and is disabled for sea service an amount equal to one-half the pay of his rating at the time of his discharge. The man who has served 10 years may receive a "suitable amount" up to a maximum of \$8 monthly, with the further limitation that if he is also receiving a pension his allowance may not exceed one-fourth the amount of his pension. Both the 10-year man and the 20-year man receive a double allowance if the disability was incident to aviation duty.¹

B. GENERAL PENSION LAWS.

The principle that some compensation was due from the Government for disability or death had been established by legislation long before the outbreak of the Civil War. In general, in 1860, the man totally disabled in service and the widow and children of the man dying as a result of service were entitled for life to one-half of the pay the man was receiving at the time of his injury or death; the minimum rate for total disability was fixed at \$8 a month and the maximum rate for disabled men and for widows was half the pay of the lieutenant colonel. The man who was slightly disabled received a pension at a lower rate according to the extent of his disability.

In 1862 the minimum for a widow was raised to \$8 and the maximum for a widow or a totally disabled man was reduced to \$30 monthly. Four years later a supplementary allowance of \$2 monthly was granted to the widow for each child under 16 years of age. The widow's scale was again amended in 1886 by raising the minimum to \$12 monthly. For the disabled man a pension based not on the pay of his rank but on the nature of his disability was first provided in 1864, when he was allowed \$25 monthly for the loss of both hands or the sight of both eyes, and \$20 monthly for the loss of both feet. The list of disabilities for which pension rates were specified was soon extended and practically reached its present form in 1872. The rates have been greatly increased, however, since that time. (See Appendixes B and I.)

During the fiscal year ended June 30, 1860, there were on the pension roll 11,284 persons and the expenditure for pensions was a

¹ For further details of Army and Navy retirement systems see Appendixes E and F.

little over a million dollars. In 1865, the number of pensioners under the general law had jumped to 85,986 and the annual expenditure to \$8,500,000. The number of persons receiving pensions because of disability or death in the service reached its maximum in 1891, with 530,174 persons on the rolls and an annual expenditure of over \$104,000,000. Since that time the decrease in number of pensioners and in annual disbursements for disability or death in the service has been continuous, although during the year ended June 30, 1916, there were still more than 140,000 persons on this roll and the disbursements amounted to \$30,700,000. The total expenditure for these pensions from 1860 to 1916 has amounted to almost two and three-fourths billion dollars (\$2,735,635,725.89). The disbursements to disabled survivors have been more than double those to widows and other dependents, 70 per cent of the total amount having been paid to survivors and 30 per cent to widows and others. It is only since 1878, however, that the annual disbursements to disabled survivors have been greater than those to the dependents of men killed in the service. Year by year from 1864 to 1874, inclusive, the number of dependents on the roll was greater than the number of disabled survivors. And from 1860 to 1877, inclusive, the annual disbursements to dependents were greater than those to survivors. (See Appendix L.)

DISABILITY PENSIONS.

Any man disabled in the military or naval service of the United States who is not eligible for retirement pay is entitled to receive, upon application, a pension for disability varying in amount from \$6 to \$100 monthly.¹ For certain permanent specific disabilities the amount is fixed by law, and the award is made for life. The maximum rate of \$100 is granted for total blindness or the loss of both hands or both feet. Curiously enough, "disability requiring regular aid and attendance" is awarded a lower rate—\$72 monthly. "Incapacity to perform manual labor" is rated at \$30. The lowest rate for a specific disability fixed by law is the \$24 monthly granted for "disability equivalent to the loss of a hand or a foot."

SCHEDULE 1.—*United States. Monthly pension rates fixed by law for permanent specific disabilities.*

\$100.00.	Loss of both hands.
	Loss of both feet.
	Loss of sight of both eyes.
	Loss of sight of one eye, the sight of the other having been lost before enlistment.

¹ Physicians who are serving as a part of the Medical Corps in the new Army but who have not been part of the Medical Corps of the Regular Army are eligible, not for retirement, but for pension, in case of disability incurred in the service. The same is true of drivers and other men who enlist for service in the United States Army Ambulance Corps. Female nurses, on the other hand, of the female nurse corps of the Army or Navy are employed and not enlisted and have no pensionable status. Members of the Red Cross units—physicians, drivers, nurses, or others—although they are under Army orders, have no Army status, and therefore no pensionable status.

- \$72.00. Disability requiring regular aid and attendance.
- \$60.00. Loss of one hand and one foot.
Total disability in one hand and one foot.
- \$55.00. Loss of either a leg at the hip joint or an arm at the shoulder joint, or so near as to prevent the use of an artificial limb.
- \$50.00. Disability requiring frequent and periodical but not constant aid and attendance.
- \$46.00. Loss of an arm at or above the elbow or a leg at or above the knee.
Total disability in arm or leg.
- \$40.00. Loss of hand or foot.
Total disability in one hand or one foot.
Total deafness.
- \$31.25. Total disability in both hands or both feet.
- \$30.00. Incapacity to perform manual labor.
- \$24.00. Disability equivalent to the loss of a hand or a foot.

For minor disabilities rates are scheduled by administrative ruling, and these vary from \$2 to \$27. However, the law provides that the monthly pension may not be less than \$6, and when a disability rated at \$2 or \$4 monthly occurs alone the pensioner receives the \$6 minimum. (See Appendix C.) For disabilities which are not permanent the pensioner is subject to periodical examination, and the pension may be renewed at a different rate or withdrawn.

With the slight exception noted below, the amount of a disability pension is the same for all without regard to rank, length of service, or the number of the disabled man's dependents. For minor disabilities rated at \$8 or less in the disability schedule, the allowance is graded according to rank up to a \$30 maximum. (See Appendix D.) It will be remembered, however, that officers in the Regular Establishment are provided for through the retirement systems, and are not eligible to a pension while receiving retired pay.

PENSIONS FOR DEPENDENTS.

The widow of a man killed in the service or dying as the result of injury or disease in the service is eligible to a pension varying from \$12 to \$30 monthly according to her husband's rank. For each legitimate child of the deceased who is under 16 years of age the widow receives, regardless of the rank of the soldier, a supplementary allowance of \$2 monthly. Marriage subsequent to the close of a man's military or naval service does not entitle the widow to a pension under the general law unless she has lived with the deceased continuously from the date of marriage to the date of his death.

The widow's pension is payable until her death or remarriage, when it reverts to the children or ceases altogether. If the widow has remarried and has again become a widow, she is again entitled to pension provided she is then without means of support and was the wife of the man on whose behalf she claims pension during the time of his active service in any war. The law makes the further

proviso that if in the meantime the pension has been paid to the children and they are still of pensionable age or condition it shall return to the widow only if the children are in her care.

If there is no pensionable widow, the amount of the widow's pension may be paid to the legitimate children under 16 years of age, together with the supplementary allowance of \$2 monthly. (A child born before the marriage of its parents is deemed legitimate if it has been acknowledged by the father.) The pension for one motherless child is from \$14 to \$32, according to the rank of the father, and for five motherless children from \$22 to \$40. No child over 16 years of age is entitled to a pension unless he is insane, idiotic, or otherwise mentally or physically helpless; and an older helpless child may not be pensioned unless he was under 16 years of age at the time of the father's death.

For the children and the widow who has not remarried the fact of the relationship entitles to a pension without regard to their economic status. The parents or the brothers and sisters of the deceased, on the other hand, must prove that they are "without other present means of support than their own manual labor or the contributions of others not legally bound for their support." And in no case are they eligible to a pension if there is a pensionable widow or child. The monthly amount, \$12 to \$30, according to the rank of the deceased, is payable to the mother, or the father, or to orphan brothers and sisters under 16 years of age.¹

C. SERVICE PENSIONS.

Service pensions had been granted before 1860 to men who had served at least six months or until the close of the Revolutionary War and to their widows and children. In 1862 a law was passed practically excluding new claims for pensions under these old laws.

The first pension for service in any other war, granted without reference to disability or death incurred in the service, was granted in 1871. This applied only to the War of 1812. The first Mexican War service pension was enacted in 1887 and the first Civil War service pension in 1890.

Since 1890 the monthly rates for service pensions have been repeatedly raised. They are not, however, uniform for the various wars. For example, pensions to Civil War veterans under the most recent act affecting them (May 11, 1912) range from \$13 to \$30, according to age and length of service. (See Appendix H.) Pensions to men who participated in the Indian wars are fixed at \$20 monthly. Pensions to widows without children under 16 years of age range from \$12 to \$20 monthly. Children under 16 years of age of men who served at

¹ For further details as to pensions to disabled men and to dependents under the general law see Appendixes A to D.

least 90 days in the Civil War are eligible to pension, but no children are provided for under service acts relating to other wars. The rate for each child of a pensioned mother is \$2 monthly; a family of motherless children receives \$12 monthly plus the \$2 extra for each individual child. As with pensions under the general law, a "helpless" child over 16 is pensionable provided he was under 16 years of age at the time of his father's death. Dependents other than widow and children are not eligible to service pensions.

Not only have the rates of the Civil War service pensions been raised since 1890, but the limitations concerning disability or dependency have been relaxed. At first a man was eligible to a pension only if he were incapacitated for manual labor, although his disability need bear no relation whatever to his Civil War service, and a widow must have been without means of support other than her own daily labor. Now, however, age without disability entitles a man to a Civil War service pension, and any widow who was married before June 27, 1905, to a man who had served 90 days in the Civil War is entitled to pension without regard to dependency.¹

The service pensions for the War of 1812 and the Mexican War had little effect upon either the amounts paid to pensioners or the number of beneficiaries. The Civil War service pension act (1890), on the other hand, raised the total number of pensioners under all laws from approximately 540,000 in 1890 to 965,000 in 1893.

The rates for the service pension at that time ranged from \$6 to \$12 and were higher than those awarded for very minor disabilities under the general law. It would appear that many pensioners may have applied for transfer to the service pension roll since the total number of pensioners under all laws continued to increase until 1902, although the number of pensioners under the general law declined steadily and rapidly after 1891, and this rapid decline could hardly be accounted for by the number of deaths occurring among the pensioners. Furthermore, the total number of pensioners, after remaining fairly constant for three years after 1902, began to decrease rapidly after 1905, while the decrease in the number of service pensioners did not begin until four years later and was checked temporarily by the passing of a new law in 1912.

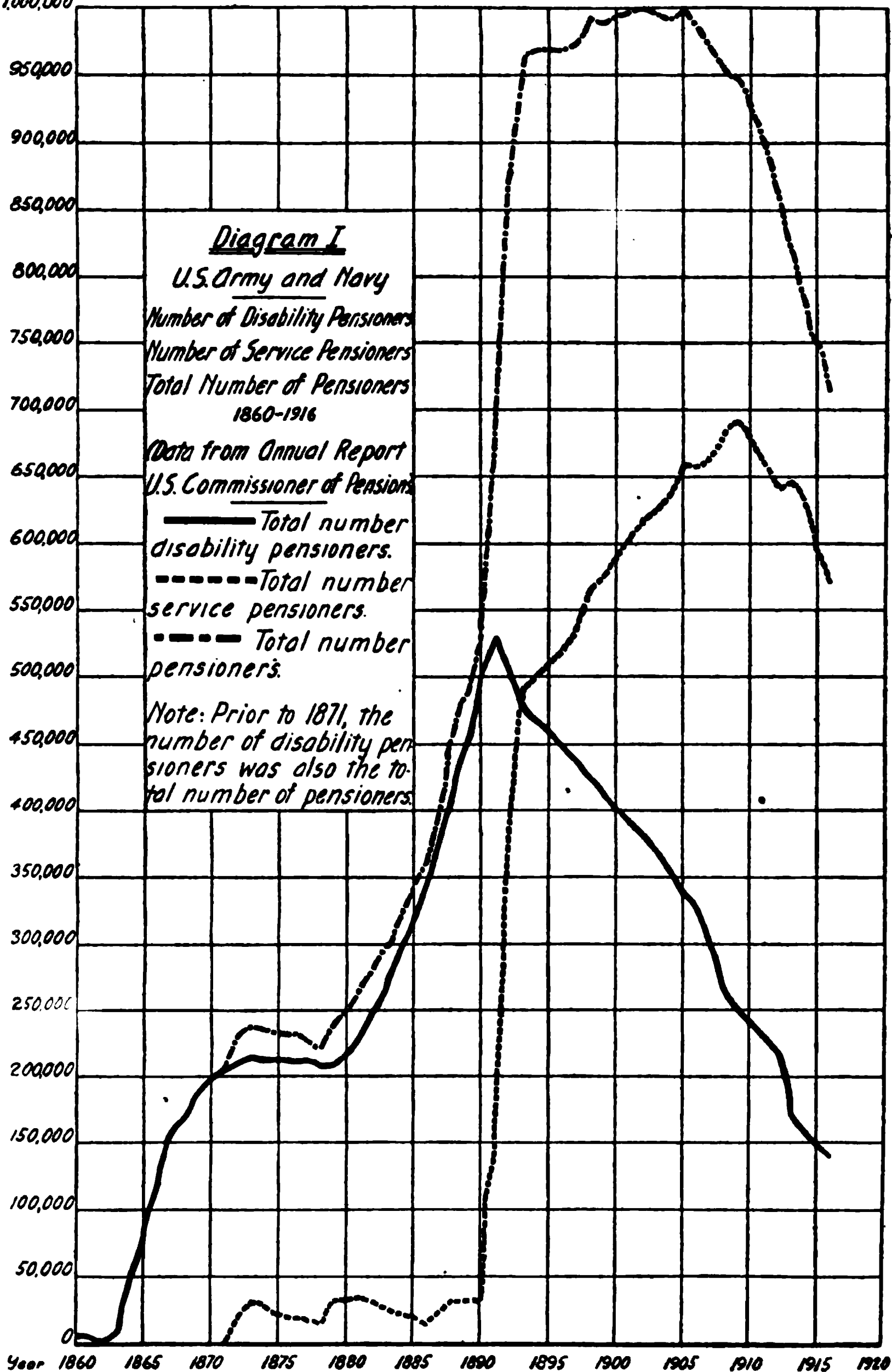
The difference between the maximum number of pensioners under the general law and the maximum number under the service acts is noteworthy: 530,000 persons received pensions in 1891 for death or disability incurred in the service; 693,000 persons received pensions in 1909 for service without regard to cause of death or disability.

The effect of the service pension legislation upon pension expenditure has been striking. The total amount paid in pensions from 1860 to 1916 is nearly five billion dollars (\$4,946,792,242.90), and more than

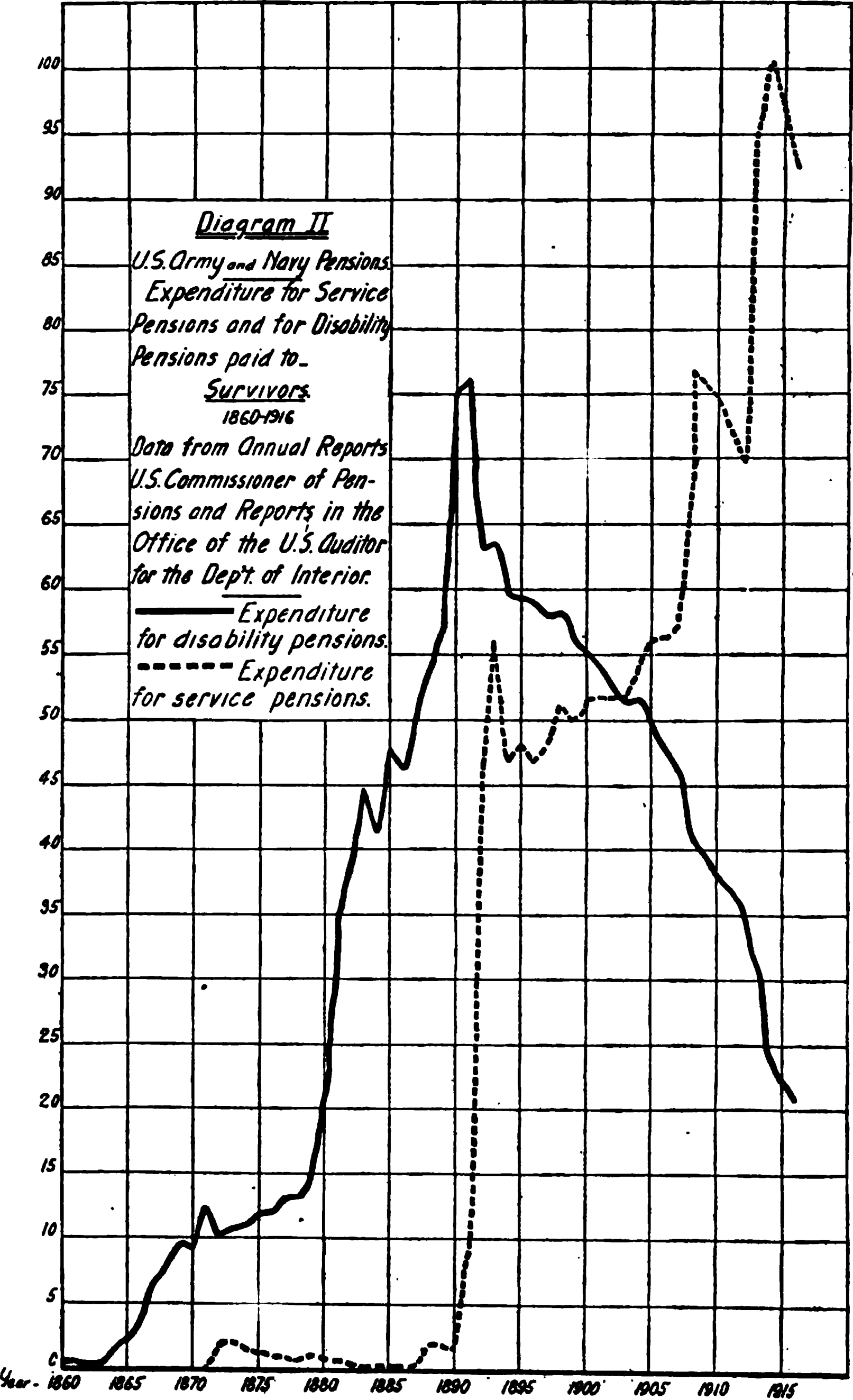
¹ For further details of service pension provisions see Appendixes G, H, and J.

Number of Pensioners

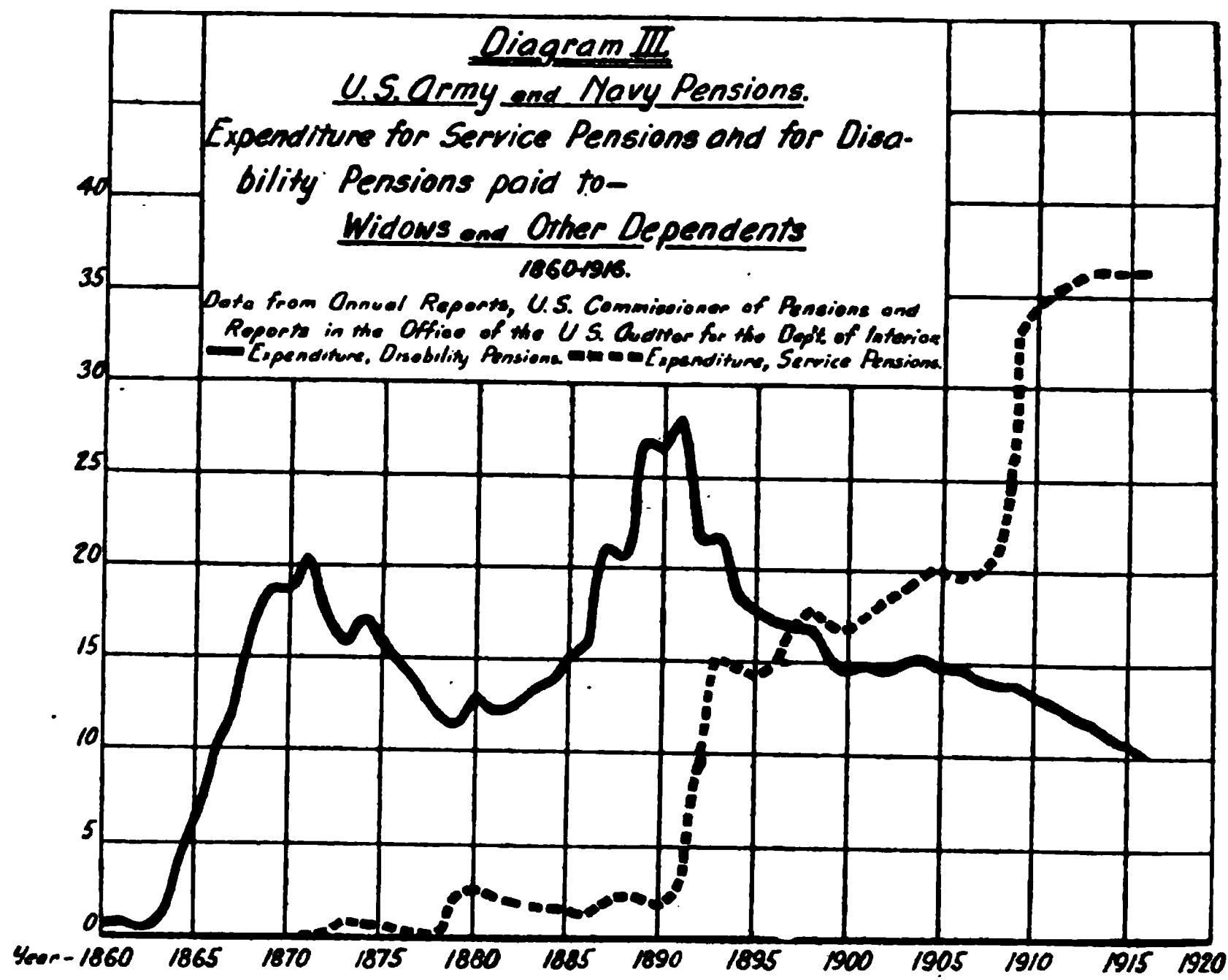
1,000,000



Expenditure for Pensions
by Millions of Dollars.



Expenditure for Pensions
by Millions of Dollars.



two-fifths of this amount, 44.7 per cent (\$2,211,156,517.01),¹ has been paid for service pensions. The largest annual expenditure for pensions under the general law was the \$104,500,000 paid to 530,000 persons in 1891. The largest annual expenditure for service pensions was the \$136,800,000 paid to 627,000 persons in 1914.

In this connection the total number of soldiers and sailors engaged in all the previous wars of the United States is of interest:²

Revolutionary War.....	184, 038
War of 1812.....	286, 730
Mexican War.....	78, 718
Indian wars.....	83, 993
Civil War.....	2, 213, 365
Spanish War.....	312, 000
Philippines and China.....	146, 151
Total.....	3, 304, 995

Payments under the service acts were negligible until after the passing of the first Civil War service act, when they increased from \$1,766,874 in 1890 to \$56,133,570 in 1893. When the service pensions were increased for the older pensioners in 1907, the number of

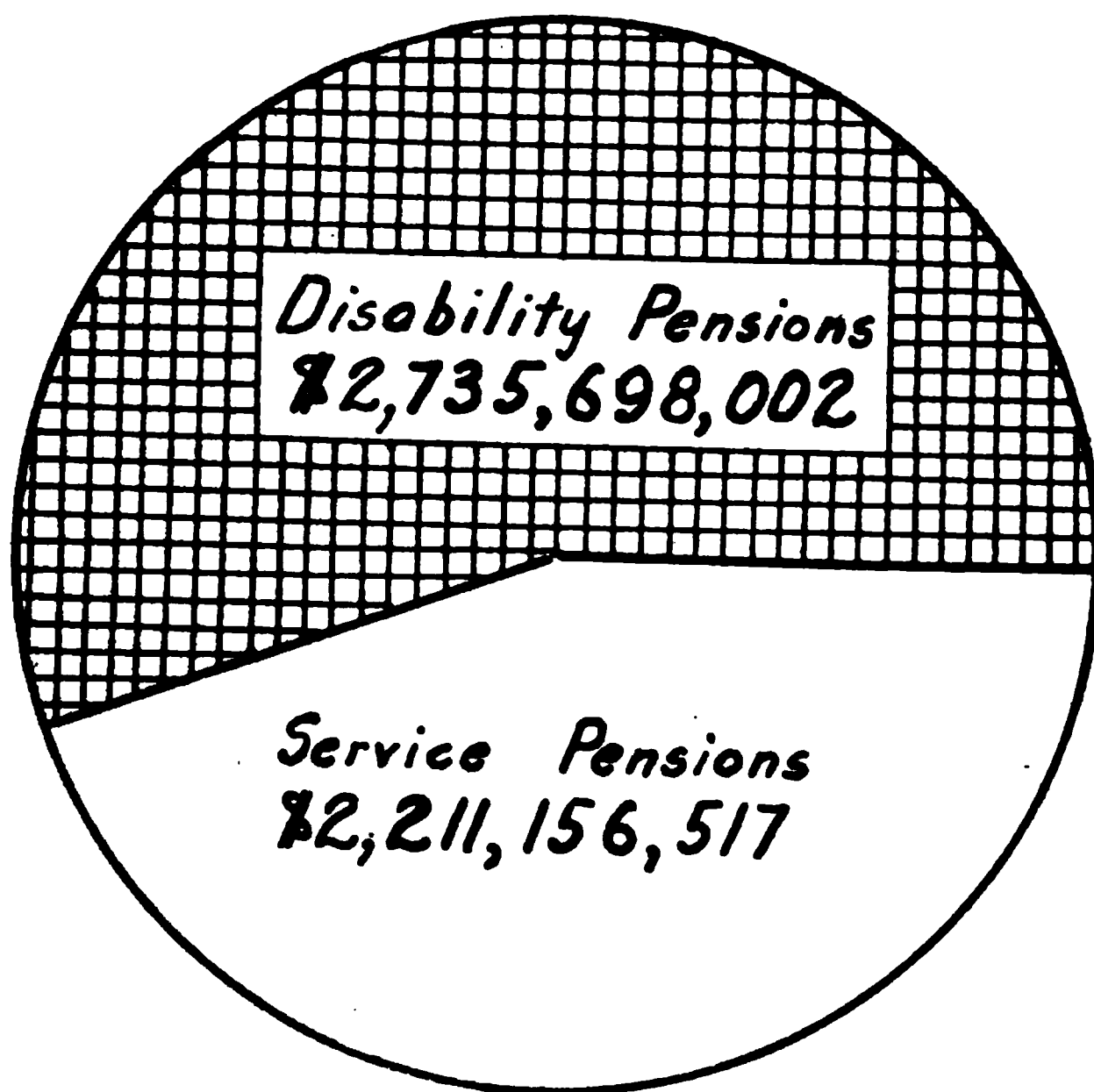
¹ Diagram IV includes in the amount shown for disability pensions arrears for the years 1886-1890. See Appendix L.
² From annual report of the Commissioner of Pensions, 1905, pp. 520, 579.

Diagram IV

U. S. Army and Navy Pensions.

*Amount Expended for Service Pensions
and for Disability Pensions*

1860-1916



pensioned survivors rose slightly and the annual expenditure, to survivors only, rose from \$57,000,000 in 1907 to \$76,500,000 in 1908. Again, in 1912, the rate was increased and annual expenditure to survivors rose from \$69,500,000 in 1912 to \$94,500,000 in 1913.

In the same way the number of widows on the service-pension roll increased a little more rapidly after the change in the widows' law in 1908 and the annual expenditure for service pensions to widows rose from \$21,000,000 in 1908 to \$32,750,000 in 1909. (See Appendix L.)

The total expenditure for pensions has been so great that the millions of dollars appropriated by special acts on behalf of individuals are a small percentage of the total. An analysis of the annual reports of the Commissioner of Pensions shows that from

1861 to 1901, inclusive,¹ the number of new pensioners added year by year plus the number of pensioners receiving an increased amount was 2,837,455 under the public acts and 8,172 under the special acts. Since 1901, however, there has been a marked increase in the amount of special pension legislation, so that the total number of persons affected by special acts from 1861 to 1915, inclusive, had risen to 45,217. Most of the special legislation is concerned with granting a special rate to pensioners already on the rolls under the public laws. Since 1901, for example, seven-eighths of the special acts have granted increases and only one-eighth have added new pensioners to the roll.

The part played by pensioners under special acts during the last six years appears more clearly from the following comparison compiled from the annual reports of the Commissioner of Pensions. (Similar data are not readily available for the earlier periods.)

SCHEDULE 2.—*Pensions under public and special laws, 1911 to 1916.*

Year ended June 30—	Pensions under public laws.			Pensions under special laws.		
	Number of pensioners.	Annual value of pensions.		Number of pensioners.	Annual value of pensions.	
		Total.	Average.		Total.	Average.
1911.....	869,775	\$148,222,880.80	\$170.40	22,323	\$6,611,357.00	\$296.17
1912.....	838,210	144,973,569.40	172.96	22,084	6,584,572.00	298.12
1913.....	798,184	164,791,688.82	206.46	22,016	6,699,096.00	304.28
1914.....	765,559	160,504,849.26	209.66	19,680	5,944,484.00	302.05
1915.....	726,499	154,531,719.78	212.71	21,648	6,640,722.00	306.76
1916.....	688,913	147,473,711.26	214.07	20,659	6,235,218.00	301.83

TENDENCIES IN FOREIGN PENSION LEGISLATION.

A comparison of these American laws with the provisions for soldiers' dependents in certain European countries and British dominions² reveals various tendencies or types of provision with which American laws have not hitherto been concerned.

Possibly the most striking difference from American laws is the almost universal provision for separation allowances paid to the families of men on active service. In Great Britain and the British colonies and in Russia an allowance is paid to the wife and children of every enlisted man;³ in many cases this varies according to the size of the family. Elsewhere such an allowance is granted only in case of need or, as in Holland, the amount is graded not by the size of the family but by its economic status. In addition, Great Britain

¹ July 1, 1861, to June 30, 1901.

² The following countries have been studied and their provisions are presented in the later sections of this report: Australia, Austria, France, Germany, Great Britain, Italy, Netherlands, New Zealand, Russia, South Africa, Switzerland. The Canadian system is presented in a separate report published by the Children's Bureau under the title "Care of Dependents of Enlisted Men in Canada."

³ Except, apparently, Russians who are serving their required term.

and the British colonies¹ require allotment to the wife of part of the pay of the enlisted man. Alone among the belligerent countries studied the United States is making no allowance whatever for the families of men in active service;² the United States permits but does not require an allotment of pay.

The amounts of the separation allowances vary widely. In Germany, for example, the stated allowance is frankly a minimum, which may be increased for each community at the discretion of the local distributive agencies. In fact, it is frequently supplemented from State or municipal funds. Germany also grades the amount of the income which a family may possess without forfeiting separation allowance according to the type of community in which the family lives. Russia gives the cash equivalent of specified food staples and their cash value is determined for each Province separately. Practically every country has increased the amount of its allowances since the outbreak of the war. Where the present amounts seem small when measured by American standards of living, it is only fair to remember that a smaller monetary unit goes relatively further than its equivalent in American currency.

Both France and Germany have since the war extended to all wives who are receiving separation allowances the maternity benefits already provided in the German system of social insurance and in the French maternity benefit law of 1913. In Great Britain a new provision of the national insurance act requires that every man who joins the Army or Navy be insured and his premiums deducted from his pay. His wife then becomes eligible for a maternity benefit of 30 shillings (\$7.30) for each confinement. In other ways also new efforts are everywhere evident to adapt the allowances and pensions to the actual needs of the situation. For example, the illegitimate child who has been acknowledged by the father is now almost everywhere entitled to benefits, and Great Britain gives the unmarried wife a separation allowance in certain circumstances, provided the man chooses to allot his pay to her. In Germany the unmarried woman is entitled to a maternity benefit if she has already an illegitimate child on whose behalf she is drawing an allowance.

¹ South Africa, no data on this point except for British Army reservists.

² The United States appropriated in 1916 the sum of \$6,250,000 for the care of families dependent upon enlisted men in the National Guard during their service on the Mexican border. The allowance varied according to the amounts the soldiers had been contributing to their families up to a maximum of \$50 monthly. (39 Stat. L., 649, 859.)

10 Cash equivalent of 41.2 pounds flour, 9 pounds grits, 3.6 pounds salt, nine-tenths of 1 pound vegetable oil for each dependent; child under 5 years old receives one-half these amounts. Allowances apparently not granted to families of soldiers serving their required term.
11 First dependent, maximum \$9.49; second, \$5.27; third, \$3.63; fourth and subsequent, \$2.11 each.
12 First dependent, maximum \$1.32; each subsequent, rates vary from first, \$4.22 to fourth, \$1.06.
13 Other dependents include mother, married sister if she is a widow, and invalid father if he is a widower, who receive at wife's rate; brothers and sisters under 16 and children of dependent widowed sister, who receive at children's rate. Total of allowances for all dependents must not exceed \$29.20.
14 Mother only, if indowed or deserted, or husband entirely incapacitated for work, and if soldier is sole support and no allowance is paid to wife or child.

SCHEDULE 3.—Comparative schedule of military pay of enlisted men (lowest rank) and of separation allowances to their dependents.

Monthly rate in American currency in—

Recipients of pay or separation allowances.	United States.	Austria.	France.	Germany.		Great Britain. ¹		Colonies of Great Britain.				Italy. ⁶	Nether-lands. ⁷	Russia.	Switzer-land.
				May-Oct.	Nov.-April.	Soldier.	Sailor or marine.	Aus-tralia. ²	Canada. ⁵	New Zealand. ⁴	South Africa. ³				
Enlisted man (lowest rank) ^a	\$33.00	\$0.97	\$1.45	\$3.78	\$3.78	\$7.30	\$9.12	\$43.80	\$33.00	\$7.30	\$7.30	\$1.74	(7)	\$0.39	\$2.90
Wife and children:															
Wife.....			7.20	3.57	4.76	9.49	6.32	10.44	20.00	9.84	15.37	4.63			
Wife and 1 child.....			11.55	5.36	7.14	16.86	12.65	13.22	20.00	15.11	20.91	6.95			
Wife and 2 children.....			15.90	7.15	9.52	22.13	17.37	15.99	20.00	18.80	26.44	9.26			
Wife and 3 children.....			20.25	8.94	11.90	25.82	21.08	18.77	20.00	20.91	31.97	11.58			
Wife and 4 children.....			24.60	10.73	14.28	28.99	23.19	21.54	20.00	23.01	36.89	13.89			
Each subsequent child.....			4.35	1.79	2.38	3.16	2.11	10 2.77		2.11	4.92	2.32			
Motherless children:															
1 child.....			19 7.20	1.79	2.38	7.38	7.38	2.77	20.00	5.27	5.53	2.32			
2 children.....			11.55	3.58	4.76	13.70	13.70	5.55	20.00	10.54	11.06	4.64			
3 children.....			15.90	5.37	7.14	20.10	20.10	8.32	20.00	15.81	16.59	6.96		(14)	
4 children.....			20.25	7.16	9.52	26.39	26.39	11.10	20.00	21.08	22.12	9.28			
Each subsequent child.....			4.35	1.79	2.38	6.32	6.32	2.77		5.37	5.53	2.32			
Other dependents:															
1 parent.....			13 4.35	1.79	2.38				18 20.00			4.63			
2 parents.....			8.70	3.58	4.76							7.50			
1 brother or sister.....			4.35	1.79	2.38	(15)	(16)	(17)				4.63			
Each subsequent brother or sister.....			4.35	1.79	2.38							2.31			

¹ All children under 14. Different rates if one child is 14 or over.
² Imperial forces only. British Army reservists receive pay of British Army; families receive allowance on a slightly higher scale than Imperial forces.
³ Expeditionary force only. British Army reservists receive pay of British Army; their families, an allowance graded by size of family: Wife only, \$11.66; wife and 4 children, \$25.78.
⁴ British Army reservists only. Pay of colonial contingent \$36.50; information about allowances not available.
⁵ British Army reservists only. Information as to colonial contingent not available.
⁶ The amounts stated are fixed for capitals of provinces or districts. The rates in other communes are slightly lower.
⁷ Families of wage earners in militia or in actual service in first or second reserve. Information as to present pay of enlisted men is not available.
⁸ In some countries part of soldier's pay must be allotted to the family.
⁹ Peace service rate.
¹⁰ Only fifth and sixth child; seventh and subsequent receive no allowance.
¹¹ Each dependent 8 years of age and over, cash equivalent of 42/100 of a kilogram of beef (according to laws of 1912 and 1873); each child under 8 years, one-half of this amount.
¹² If soldier's parent is head of family, he or she receives \$7.20 instead of \$4.35; each additional dependent receives \$4.35.
¹³ Amount varies; maximum is \$24.12.

- 14 Cash equivalent of 61.2 pounds flour, 9 pounds grits, 3.6 pounds salt, nine-tenths of 1 pound vegetable oil for each dependent; child under 5 years old receives one-half these amounts. Allowances apparently not granted to families of soldiers serving their required term.
- 15 First dependent, maximum, \$9.49; second, \$5.27; third, \$3.68; fourth and subsequent, \$2.11 each.
- 16 First dependent, maximum \$6.32; each subsequent, rates vary from first, \$4.22 to fourth, \$1.06.
- 17 Other dependents include mother, married sister if she is a widow, and invalid father if he is a widower, who receive at wife's rate; brothers and sisters under 16 and children of dependent widowed sister, who receive at children's rate. Total of allowances for all dependents must not exceed \$29.20.
- 18 Mother only, if indowed or deserted, or husband entirely incapacitated for work, and if soldier is sole support and no allowance is paid to wife or child.

England has recently provided that special allowances may be paid to enable men to meet financial obligations contracted before they entered the service for the following purposes: To buy furniture or real property, to pay rents or taxes, to meet payments on loans or mortgages, or to pay for children's schooling. The need for financial assistance must be proved and the amount paid by the State can not exceed £104 (\$506.12) per annum.

Several countries permit the pension for a partially disabled man or for the widow of a man killed in service to be commuted into a lump-sum payment, provided the pensioner can satisfy the authorities that this will better serve his needs. Great Britain, again, and certain of the colonies, make substantial variations in the pensions allowed for total disability according to the number of the man's dependents.

Practically all countries vary their disability pensions and pensions to widows and other dependents of men killed in service according to the military rank of the man. Switzerland, on the other hand, has related her military compensation to her civil insurance scheme and bases the allowances for disability and death on the man's civil earnings up to specified maxima. England allows a disabled man or a widow to receive, under certain conditions, a pension based not on disability but on prewar income. If the enlisted man can prove, for example, that the disability pension, including the additional allowance for children, and his present average earnings amount to less than his prewar earnings, he may be granted a pension which, together with his average earnings, will equal but not exceed his prewar earnings up to a maximum of 50 shillings (\$12.17) a week, and half of any prewar earnings between 50 and 100 shillings (\$12.17 and \$24.33) a week.

The new pension law in Italy and the proposed law in France include detailed categories of injuries which aim to measure the extent of disability not in terms of military usefulness but in terms of civil usefulness and earning power. Fine adjustments of the relation of the injury to the individual's occupation have not been attempted, even in Germany. And nowhere are the pensions granted to a disabled man lowered or withdrawn if he is able to increase his earning power by special training.

Various methods have been devised to provide for a disabled man and his dependents during his reeducation. In Canada the disabled man can be reenlisted for industrial training, and during the period of training his family receives allotted pay and separation allowances. Great Britain and Italy enforce plans for reeducation by withholding their part of the pension from a man who refuses to undergo treatment or training certified as necessary for his interest.

Monthly rate in American currency of pension payable to several classes of beneficiaries in—

Beneficiaries.	Austria.		France.	Germany.		Great Britain.	Colonies of Great Britain.				Italy.	Nether-lands.	Russia.	Switzer-land.
	United States.			Dis-ability pen-sion.	Bonuses added to pension.		Australia.	Canada.	New Zea-land.	South Africa.				
	Soldier.	Sailor.												
Enlisted man (lowest grade) whose disability is equal to— 100 per cent, with constant need of attendance..... 100 per cent, without constant need of attendance....	\$72.00	\$6.08	\$6.28	\$19.30	\$10.72	\$50.07	\$42.16	\$60.84	\$47.43	\$40.55	\$25.09 to 22.68	\$12.06 to 8.04	\$9.26	\$70%
	100.00	6.08	6.28	19.30	10.72	28.99	31.62	40.00	36.89	40.55	20.27	12.06 to 8.04	7.20	\$70%
Wife of disabled man...	.....	\$1.01		.....	.....	.....	15.81	.....	13.18	.....	.....	.....	.....	.....
Each child of disabled man whose disability is equal to 100 per cent.....	.....	\$1.01		1.61	.....	5.27 to 2.64	10.54 to 5.27	6.00	7.91	.....	.....	.....	.....	.....

¹ Granted only to unmarried man, in case of indigence; otherwise no increase for need of attendance.

² Percentage of civil earnings.

³ Special allowance payable until 6 months after close of the present war. A supplementary allowance varying from \$3.04 to \$1.01 monthly is also granted to disabled men until 6 months after close of present war.

SCHEDULE 5.—Comparative schedule of pensions to dependents of enlisted men (lowest rank) killed in battle.

Monthly rate in American currency of pension payable to several classes of beneficiaries in—														
Beneficiaries.	United States.	Austria.	France.		Germany.	Great Britain	Colonies of Great Britain.				Italy.	Nether-lands.	Russia.	Switzer-land. ¹
			Normal.	Excep-tional.			Aus-tralia.	Canada.	New Zea-land.	South Africa.				
Widow and children:														Per cent.
Widow.....	\$12.00	\$2.84	\$6.03	\$9.06	\$7.94	\$14.49	\$21.08	\$32.00	\$26.35	\$28.39	\$10.13	\$4.02	\$2.06	40
Widow and 1 child.....	14.00	3.65	6.03	9.06	11.27	19.76	31.62	38.00	34.26	34.94	10.13	5.03	3.09	55
Widow and 2 children.....	16.00	4.46	6.03	9.06	14.01	24.15	39.53	44.00	42.16	41.37	10.13	6.23	4.12	70
Widow and 3 children.....	18.00	5.27	6.03	9.06	17.93	27.67	44.80	50.00	50.07	47.94	10.93	6.92	5.15	85
Widow and 4 children.....	20.00	6.08	6.03	9.06	21.26	30.31	50.07	58.00	57.96	54.31	11.74	7.44	6.18	100
Each subsequent child.....	2.00				3.33	2.64	5.27	6.00	7.91	6.47	.80	2.60	1.03	.....
Motherless children:														
1 child.....	14.00	1.22	6.03	9.06	4.76	7.38	15.84 to 10.55.	12.00	10.54	6.47	10.13	2.01	2.50	25
2 children.....	16.00	2.44	6.03	9.06	9.52	13.70	31.68 to 21.10.	24.00	21.08	12.94	10.13	3.03	5.00	50
Each subsequent child.....	2.00	1.22			4.76	6.32	15.84 to 10.55.	12.00	10.54	6.47	9.30	1.01	2.50	25
Other dependents:														
Mother alone.....	12.00		(7)			15.81	Each, \$21.08; aggregate, \$42.16.	24.00	Maximum \$26.35, if no wife or children; \$19.76, if there are children or wife.	20.24	10.13			20
Father alone.....	12.00		(7)			15.81		24.00		20.24	10.13			20
Father and mother.....	12.00		(7)			15.81		24.00		20.24	10.13			25
Grandmother.....			(7)					24.00		20.24				15
Grandfather.....			(7)											15
Grandmother and grand-father.....			(7)			Varies...				20.24				25
Each brother or sister.....	12.00									20.24	10.13			15

¹ Percentage of civil earnings.² Fifth child only.³ Rate for largest cities; slightly lower rate elsewhere. See Schedule 66, p. 202.⁴ Five or less.⁵ Fifth and later.aid granted. See Schedule 14, p. 61.
and sisters.

25 per cent.

The ages up to which children are eligible to pensions or separation allowances vary from 12 years for separation allowances in Italy to 21 years in Great Britain for pensions to children of soldiers or sailors if they are attending school or receiving technical training. Austria regards as the "normal age" at which allowances and pensions are withdrawn 16 years for boys and 14 years for girls. Germany grants separation allowances only until 15 but pensions until 18 years of age. The new Italian law gives pensions also until 18.

In general, parents or brothers and sisters are eligible for benefits only in the absence of both widow and children, and only if the parents or brothers and sisters were dependent upon the deceased. Italy's new law includes a generous definition of this dependency and Great Britain has added to the dependency provision the alternative that the deceased son or brother was apprenticed at a recognized trade or receiving training at school or articted for a profession.

AUSTRIA.¹

ALLOWANCES.

Under the law of December 26, 1912,² relatives of a soldier called to the colors in case of mobilization receive separation allowances provided they are dependent for their living on the soldier's earnings. Persons entitled to the allowance are the wife, children (legitimate and illegitimate), father, mother, unmarried mother, father-in-law and mother-in-law, and brothers and sisters. Each dependent 8 years of age and over is entitled to a sum equivalent to the amount payable for the maintenance of the soldier to the persons with whom he is quartered during maneuvers in time of peace. A law of 1879, to which the law of 1912 specifically refers, fixes this amount at forty-two one-hundredths of a kilogram of beef daily.³ The cash equivalent is determined annually by the military authorities. Children under 8 years of age receive one-half the amount allowed to adults and older children. Dependents who must pay rent in the soldier's absence receive in addition a rent allowance equal to 50 per cent of the maintenance allowance. The allowance to dependents may not, however, exceed the soldier's average daily earnings in civil life.⁴

¹ The Austrian material was prepared by Miss Judith Bernays and Miss Mary D. Hopkins, from the *Reichsgesetzblatt für die im Reichsrat vertretenen Königreiche und Länder* (Wien, Kaiserliche und Königliche Hof- und Staatsdruckerei). It was not possible to include the provisions for Austrian officers without delaying the publication of the report; but these are now being compiled, and information about Austrian officers can be secured from the Children's Bureau.

² Law of Dec. 26, 1912, R. G. Bl., 1912, No. 237, p. 1201; Order of the Minister of National Defense, Dec. 28, 1912, R. G. Bl. No. 238, p. 1203.

³ Forty-two one-hundredths of a kilogram equals nine hundred and twenty-six one-thousandths of a pound.

⁴ The Austrian private soldier of the lowest grade receives 16 heller a day, or 4.8 kronen (97 cents) a month. (H. Schmid, *Handbuch für Unteroffiziere*, Wien, H. Schmid, 1916, pp. 542 and 602.)

Allowances are paid during the soldier's period of active service. If the soldier is killed in battle or dies of a disease contracted in active service, the allowance is continued for six months after his death.

By an imperial order and an order of the ministry of national defense, both of June 12, 1915,¹ these allowances were extended until six months after the close of the present war, and were continued to persons who left active service, and to dependents of the killed for a period longer than the six months after death, prescribed by the law of 1912. In the absence of separation allowances the two above-mentioned orders provide assistance, until six months after the close of the present war, also to disabled soldiers and their dependents and to survivors of soldiers or sailors killed or dying from injuries sustained in war. The soldier, if totally incapacitated, receives 180 kronen (\$36.47) annually, and the benefit may be increased if necessary to secure his proper maintenance. For loss of earning power of from 20 to 50 per cent and from 50 to 100 per cent he receives 60 kronen (\$12.16) annually and 120 kronen (\$24.32) annually, respectively. The wife of a man drawing an invalid's allowance receives 60 kronen (\$12.16), but her benefit, like that for his total disability, may, as an exception, be increased. Children, legitimate or illegitimate, receive in case of their father's total disability 60 kronen (\$12.16); in case his injuries belong to one of the two lower categories, 36 kronen (\$7.29). Parents and grandparents receive 60 kronen (\$12.16) each, provided the total does not exceed 120 kronen (\$24.32). The share of wife, children, or ascendants of a soldier who is drawing the maximum disability allowance may, if necessary to their maintenance, be increased; the total allowance together with the disability pension must not, however, exceed 600 kronen (\$121.56).

In case of soldier's death the widow receives an allowance of 120 kronen (\$24.31) annually; each legitimate child receives 12 kronen (\$2.43); one full orphan receives 36 kronen (\$7.29), but two receive 30 kronen (\$6.08) each; three, 24 kronen (\$4.86) each; and four or more, 18 kronen (\$3.65) each. Each illegitimate child, in the presence of a widow entitled to an allowance and to relief provided by these orders, receives 60 kronen (\$12.16); an illegitimate full orphan, previously supported by the deceased, receives 108 kronen (\$21.88); if there are two orphans, each receives 102 kronen (\$20.67); if three, 96 kronen (\$19.45); if four or more, 90 kronen (\$18.23). Boys receive the pension up to the age of 16, girls until they are 14 years old. Sixty kronen (\$12.16) each is given to the legitimate father or grandfather, to the legitimate or illegitimate mother, to the legitimate father of the illegitimate mother; the total pension to the ascendants is not to exceed 120 kronen (\$24.31).

¹ R. G. Bl. 1915, Nos. 161 and 162; or Bulletin of the International Labor Office, Vol. X, 1915, p. 228.

SCHEDULE 8.—Austria, Navy. Disability pensions (annual amounts) to noncommissioned officers and enlisted men.

[Source: Law of June 23, 1891, R. G. Bl. No. 91, amending law of Dec. 27, 1875, R. G. Bl. No. 158.]

[Amounts outside of parentheses are in kronen; amounts inside of parentheses are in dollars.]

Years of service.	Disability pensions granted to—						Injury bonus added to pension irrespective of rank or length of service.		
	Boatswain's mate; ¹ steersman; man mate; marine mate; corps bugler; engine mate; head laborer, first class; steward's mate; cook's mate; mate of medical corps; band mate.	Quartermaster; ¹ steersman, quartermaster, marine quartermaster; engine quartermaster; head laborer, second class; steward's mate; medical corps quartermaster; band quartermaster.	Topman; ¹ steersman; marine; bugler; ² engineer's assistant; stoker, first class; head laborer, first class; steward, cook; seaman of medical corps, first class; bandman, first class.	Seaman, second class; stoker, second class; seaman of medical corps, second class.	Seaman, third class; ¹ bugler; ² seaman of medical corps, third class; bandman, third class.	Seaman, fourth class; ¹ officer's servant. ⁴	Class III.	Class II.	Class I.
10 ¹	192 (38.90)	168 (34.04)	144 (28.18)	120 (24.31)	96 (19.45)	84 (17.02)			
12.....	224 (45.38)	196 (39.71)	168 (34.04)	140 (28.36)	112 (22.69)	98 (19.85)			
15.....	256 (51.87)	224 (45.39)	192 (38.90)	160 (32.42)	128 (25.93)	112 (22.69)			
18.....	288 (58.35)	252 (51.06)	216 (43.76)	180 (36.47)	144 (29.17)	126 (25.53)			
21.....	320 (64.83)	280 (56.73)	240 (48.62)	200 (40.52)	160 (32.42)	140 (28.37)			
24.....	352 (71.32)	308 (62.40)	264 (53.49)	220 (44.57)	176 (35.66)	154 (31.20)			
27.....	384 (77.80)	336 (68.07)	288 (58.35)	240 (48.62)	192 (38.90)	168 (34.04)	96 (19.45)	192 (38.90)	288 (58.35)
30.....	416 (84.28)	364 (73.75)	312 (63.21)	260 (52.68)	208 (42.14)	182 (36.87)			

such grade.

mental impairment, epilepsy, blindness, paralysis, injury incurred in service, permanent capable of earning his living in civil life, receive the pension before 10 years of service.

1. If
2. If
3. If
4. If
5. If
impaired

The widow's pension lapses at death, remarriage, failure to claim it, acceptance of a position in Government service, entrance into a cloister, emigration, or penal sentence.

If the husband of the widow's second marriage dies leaving her without pension, she may once more draw the pension she is entitled to through her first husband.

Children of officers, noncommissioned officers, and privates of a marriage duly authorized by the military authorities, or children legitimated by a later marriage so authorized, are entitled to pension if the father died in active service with claim to pension, or, dying in retirement, was maintained in an invalid home or instead drew a disability pension.¹

Children of privates and noncommissioned officers of any marriage, regardless of time or authorization, or children legitimated by a later marriage, draw the pension if the father was killed in war or died of injury or disease incurred in service.

The total amount of orphans' benefits may not exceed for an officer's children the amount of the widow's pension; and the sum total of the family's pensions may not exceed the amount of the pension received by the officer, if pensioned, before his death.

Each child of a private or a noncommissioned officer receives 48 kronen (\$9.73) per year. The amount of pensions paid to the whole family must not, however, exceed 360 kronen (\$72.94) per year.

Full orphans, or children whose mother or step-mother has no claim to the widow's pension, receive the children's pension plus 50 per cent in addition. The sum of these pensions may not exceed 360 kronen (\$72.94). Hence, if there are more than five full orphans the share of each will be 360 kronen (\$72.94) divided by their number.

Pensions to children are paid up to the so-called normal age: In case of officers' children 20 years for boys and 18 for girls, and in case of children of soldiers, 16 years for boys and 14 for girls. The pension may cease earlier if the orphan enters a military or naval educational institution, or other public institution at the State's expense, is married (if a girl), obtains a salaried position, public or private, is apprenticed to a trade, etc.

METHOD OF PAYMENT.

The widow's and orphan's pension is paid monthly in advance, beginning with the first day of the first month after the soldier's death. The children's pensions are paid to the mother or step-mother, or, if there is no such, to the guardian.

The disability pension is paid monthly in advance beginning the first day of the month after the issuing of the retirement order.

¹ Law of Apr. 27, 1887, No. 41, R. G. Bl. 1887, p. 187.

SCHEDULE 8.—Austria, Navy. Disability pensions (annual amounts) to noncommissioned officers and enlisted men.

[Source: Law of June 22, 1891, R. G. Bl. No. 91, amending law of Dec. 27, 1875, R. G. Bl. No. 158.]

[Amounts outside of parentheses are in kronen; amounts inside of parentheses are in dollars.]

Years of service.	Disability pensions granted to—						Injury bonus added to pension irrespective of rank or length of service.			
	Boatswain's mate; ¹ steersman; man mate; marine mate; corps bugler; engine mate; head laborer, first class; steward's mate; cook's mate; mate of medical corps; band mate.	Quartermaster; ² steersman, quartermaster; marine quartermaster; engine quartermaster; head laborer, second class; steward's mate; medical corps quartermaster; band quartermaster.	Topman; ³ steersman; marine; depot bugler; ⁴ engineer's assistant; stoker, first class; head laborer, first class; steward; cook; member of medical corps; bandman.	Seaman, first class; steersman; marine; engineer's assistant, stoker, first class; laborer, first class; steward; cook; seaman of medical corps, first class; bandman, first class.	Seaman, second class; stoker, second class; laborer, second class; seaman of medical corps, second class; bandman, second class.	Seaman, third class; ⁵ bugler; ⁶ seaman of medical corps, third class; bandman, third class.	Seaman, fourth class; ⁷ officer's servant. ⁸	Class III.	Class II.	Class I.
10.....	192 (38.90)	168 (34.04)	144 (29.18)	120 (24.31)	108 (21.88)	96 (19.45)	84 (17.02)	96 (19.45)	192 (38.90)	288 (58.35)
12.....	224 (45.28)	196 (39.71)	168 (34.04)	140 (28.36)	126 (25.53)	112 (22.69)	98 (19.83)			
15.....	256 (51.87)	224 (45.29)	192 (38.90)	160 (32.42)	144 (29.17)	128 (25.93)	112 (22.69)			
18.....	288 (58.35)	252 (51.06)	216 (43.76)	180 (36.47)	162 (32.82)	144 (29.17)	126 (25.53)			
21.....	320 (64.83)	280 (56.73)	240 (48.62)	200 (40.52)	180 (36.47)	160 (32.42)	140 (28.37)			
24.....	352 (71.32)	308 (62.40)	264 (53.49)	220 (44.57)	198 (40.11)	176 (35.06)	154 (31.20)	192 (38.90)	192 (38.90)	288 (58.35)
27.....	384 (77.80)	336 (68.07)	288 (58.35)	240 (48.62)	216 (43.76)	192 (38.90)	168 (34.04)			
30.....	416 (84.28)	364 (73.75)	312 (63.21)	260 (52.68)	234 (47.41)	208 (42.14)	182 (36.87)			

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¹ such grade.

mental impairment, epilepsy, blindness, paralysis, injury incurred in service, permanent inability of earning his living in civil life, receive the pension before 10 years of service.

The widow's pension lapses at death, remarriage, failure to claim it, acceptance of a position in Government service, entrance into a cloister, emigration, or penal sentence.

If the husband of the widow's second marriage dies leaving her without pension, she may once more draw the pension she is entitled to through her first husband.

Children of officers, noncommissioned officers, and privates of a marriage duly authorized by the military authorities, or children legitimated by a later marriage so authorized, are entitled to pension if the father died in active service with claim to pension, or, dying in retirement, was maintained in an invalid home or instead drew a disability pension.¹

Children of privates and noncommissioned officers of any marriage, regardless of time or authorization, or children legitimated by a later marriage, draw the pension if the father was killed in war or died of injury or disease incurred in service.

The total amount of orphans' benefits may not exceed for an officer's children the amount of the widow's pension; and the sum total of the family's pensions may not exceed the amount of the pension received by the officer, if pensioned, before his death.

Each child of a private or a noncommissioned officer receives 48 kronen (\$9.73) per year. The amount of pensions paid to the whole family must not, however, exceed 360 kronen (\$72.94) per year.

Full orphans, or children whose mother or step-mother has no claim to the widow's pension, receive the children's pension plus 50 per cent in addition. The sum of these pensions may not exceed 360 kronen (\$72.94). Hence, if there are more than five full orphans the share of each will be 360 kronen (\$72.94) divided by their number.

Pensions to children are paid up to the so-called normal age: In case of officers' children 20 years for boys and 18 for girls, and in case of children of soldiers, 16 years for boys and 14 for girls. The pension may cease earlier if the orphan enters a military or naval educational institution, or other public institution at the State's expense, is married (if a girl), obtains a salaried position, public or private, is apprenticed to a trade, etc.

METHOD OF PAYMENT.

The widow's and orphan's pension is paid monthly in advance, beginning with the first day of the first month after the soldier's death. The children's pensions are paid to the mother or step-mother, or, if there is no such, to the guardian.

The disability pension is paid monthly in advance beginning the first day of the month after the issuing of the retirement order.

¹ Law of Apr. 27, 1887, No. 41, R. G. Bl. 1887, p. 187.

Girls up to 14 years of age.....	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)
	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)	48(9. 73)
Boys up to 16 years of age.....	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)
EACH FULL ORPHAN. ¹																			
Or orphan whose mother or step-mother had no claim to widow's pension.																			
Girls up to 14 years of age.....	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)
Boys up to 16 years of age.....	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)	72(14. 50)

¹ The widow of a noncommissioned officer is entitled to pension if her marriage, during service, took place with due military authorization, and her husband at the time of his death was a, b, or c

the parents, is entitled to 1 of privates between 360 k. 1 k or \$72.94. x

SCHEDULE 10.—France. *Summary of provisions for the maintenance of soldiers' families.*

Sources of assistance.

Assigned pay.....

Separation allowance 1.

90 Nov. 18, 1915, proposing to grant a supplementary allowance for an unborn child from the fourth month of pregnancy, shown by a physician's certificate, was not passed. (J. O. dep. dec. parl., 1915, No. 1466, p. 1281.)

Indemnity for large families.
Needly families having more than 3 children, legitimated or acknowledged, dependent on them, receive aid as follows:
For every child under 13 in excess of 3, under 13, if father and mother living and caring for them together).

For every child under 13 in excess of 3, if mother is left alone).
For every child under 13 in excess of 3, if father is left alone). (Law July 14, 1913.)

Indemnity for dependent children.

Maternity benefit 14.....

(1) All French women, pregnant, bearing separation allowance, even if not habit in a paid position.
(2) All French women, pregnant, in districts, benefiting by the allowance refugees. (Law Jan. 28, 1917.)

Military pensions 15.....

FRANCE.¹

[For abbreviations used in this section see p. 67.]

**SEPARATION AND OTHER ALLOWANCES FOR FAMILIES OF OFFICERS
AND MEN IN ACTIVE SERVICE.**

The chief provisions for the support of soldiers' families in France are the separation allowance, paid to the family while the breadwinner is away serving the colors, and the pension given to the soldier either on retirement as a reward for length of service or for injuries received while in service, or to the widow or orphans of soldiers killed in action or dying from injuries received while under the colors. In addition to these two general provisions there are a number of other State allowances and privileges by which the family may benefit either as citizens or as the family of a soldier. The breadwinner himself may be able still to contribute to the family support by the assignment of a part of his military pay or of his continued civil salary. (See schedule 10, p. 42.)

ASSIGNED PAY.

The pay of privates in the French Army is negligible—25 centimes (4.8 cents) a day—and can not be relied upon as a contribution to the family fund. Above the grade of private, machinery is provided for the voluntary assignment to the family of one-half the military pay; and even for the assignment by official authority in case no voluntary assignment has been made.² This, however, is canceled if the soldier upon notification fails to sanction it and states his objection in writing to the military authorities. The plan seems to be intended as an aid in the assignment of the pay according to the soldier's wishes rather than as a measure of compulsion.

In cases of soldiers "missing" or dead the assigned pay is continued until the matter of a pension is adjusted at the end of hostilities, unless the amount of assigned pay is less than that of the pension, when the assignment stops and the claimants may at once draw advances on their pension.

Through the machinery of the civil government, mobilized men whose civil salary is continued may assign it as a whole or in part to whomsoever they wish to designate. But no provision is made for assignment by State authority in case of failure on the part of the soldier to assign.³

¹ The French material was prepared by Miss Edith Rockwell Hall.

² Decree Jan. 10, 1912 (Bull. off. min. de la guerre, vol. 60); Oct. 9, 1914 (Dalloz I, 212).

³ Law Aug. 5, 1914 (J. O. Aug. 6, 1914).

SCHEDULE 11.—*France. Military pay.*

[Source: Agenda Militaire 1916.]

A. OFFICERS AND THOSE OF EQUIVALENT RANK.

[Amounts outside of parentheses are in francs; amounts inside of parentheses are in dollars.]

Grade.	Pay (yearly pay calculated at monthly rate).
General of division:	
Chief intendant.....	} 1,665 (321.35).
General medical inspector.....	
Brigadier general:	
Military intendant.....	} 1,200 (231.60).
Medical inspector.....	
Colonel:	
Subintendant, first class.....	} 990 (191.07).
Chief physician or apothecary, first class.....	
Lieutenant colonel:	
Subintendant, second class.....	} 750 (144.75).
Chief physician or apothecary, second class.....	
Major:	
Subintendant, third class.....	675 (130.28). After 4 years of grade or 32 years of service.
Physician or apothecary major, third class.....	600 (115.80). Before 4 years of grade.
Chief administrative officer of the various services.....	
Captain:	
Assistant in the intendance.....	555 (107.12). After 12 years of grade, or 8 years of grade and 30 years of service.
Physician, apothecary, or veterinary major, second class.....	510 (98.43). After 8 years of grade, or 4 years of grade and 25 years of service.
Administrative officer of the various services, first class.....	465 (89.75). After 4 years of grade or 20 years of service.
Chief interpreter, first class.....	420 (81.06). Before 4 years of grade.
Chief musician, first class.....	
Lieutenant:	
Physician, apothecary, or veterinary aide-major, first class.....	406.50 (78.45). After 8 years of grade and 20 years of service.
Administrative officer of the various services, second class.....	361.50 (69.77). After 8 years of grade, or 4 years of grade and 15 years of service.
Chief interpreter, second class.....	331.50 (63.98). After 4 years of grade, or 10 years of service.
Chief musician, second class.....	301.50 (58.19). Before 4 years of grade.
Sublieutenant:	
Cadet sublieutenant.....	
Physician, apothecary, or veterinary aide-major, second class.....	270 (52.11). After 6 years of service.
Administrative officer of the various services.....	240 (46.32). Before 6 years of service.
Cadet veterinary aide-major, second class.....	220.50 (42.56).
Sublieutenant of reserve, who has not finished his legal time of service.....	210 (40.53).
Interpreter.....	177 (34.16).
Chaplain.....	465 (89.75).

SCHEDULE 11.—*France. Military pay—Continued.*

B. NONCOMMISSIONED OFFICERS IN ALL BRANCHES.

Grade.	Those not re-enlisted, or enlisted and re-enlisted up to the 5th year of service (daily pay calculated at monthly rate).	Reenlisted or commissioned men after their 6th year of service (monthly pay).		
		6th to 8th year (inclusive).	9th to 11th year (inclusive).	12th year and after.
Chiefadjutant.....	95. 70 (18. 47)	207 (39. 95)	207 (39. 95)	207 (39. 95)
Adjutant:				
Assistant director of music.....	73. 20 (14. 13)	177 (34. 16)	184. 50 (35. 61)	192 (37. 06)
Chief of the riding school or.....				
Assistant instructor of horsemanship.....				
Chief armorer, first class.....				
Sergeant major:				
First sergeant.....	30. 60 (5. 91)	135 (26. 06)	142. 50 (27. 50)	150 (28. 95)
Sergeant of horsemanship.....				
Chief mechanician.....				
Drum major.....				
Chief bugler or bandmaster.....				
Sergeant trumpeter.....	28. 20 (5. 44)			
Chief armorer, second class.....				
Sergeant saddler.....	27. 60 (5. 33)	126 (24. 32)	133. 50 (25. 77)	141 (27. 21)
Sergeant and quartermaster sergeant:				
Assistant quartermaster sergeant.....				
Trumpeter.....				
Sergeant mechanician or electrician.....				
Assistant sergeant or instructor of horsemanship.....	60 (11. 58)	154. 50 (29. 82)	154. 50 (29. 82)	162 (31. 27)
Assistant armorer.....				
Aspirant.....				

C. RANK AND FILE IN ALL BRANCHES (EXCEPT FIRST THREE REGIMENTS OF ALGERIAN SHARPSHOOTERS AND THE REGIMENTS OF ALGERIAN SPAHIS).

Grade.	Corporal quartermaster; brigadier quartermaster; brigadier armorer.	Corporal; drum or bugle corporal; corporal sapper; brigadier; brigadier trumpeter; musician after 10 years' service.	Master gunner; master workman.	Soldier; cavalryman; gunner; sapper; and driver of engineering trains; workmen attached to batteries; companies of workmen; assistant horse-shoer; harness maker; drummer; bugler; trumpeter; infantry sapper; soldier and pupil musician; soldiers of special sections; cadets of military preparatory schools.
Pay (daily pay calculated at monthly rate).....	21. 60 (4. 17)	12. 60 (2. 43)	8. 10 (1. 56)	7. 50 (1. 45)

SCHEDULE 11.—*France. Military pay*—Continued.

D. NONCOMMISSIONED OFFICERS AND PRIVATES, EXTRA PAY FOR LENGTH OF SERVICE.

Grade.	Branch of the service.	Daily extra pay.			Notes.
		After 3 years.	After 6 years.	After 10 years.	
Noncommissioned officers and those of equivalent rank. (See pay table.)	Cavalry and artillery of cavalry divisions.	1. 20 (0. 23)	After the sixth year the extra pay is included in the monthly pay.		¹ Extra pay of a corporal is given to musicians who receive the pay of corporals. ² Master gunners of the artillery serving beyond the required time have the right to a special extra pay of 93 centimes (\$0.18) a day.
Corporals ¹	Other branches....	1. (0. 193)			
	Cavalry and artillery of cavalry divisions.	. 93 (0. 18)	. 98 (0. 19)	1. 03 (0. 20)	
	Other branches....	. 60 (0. 12)	. 65 (0. 13)	. 70 (0. 14)	
Privates ¹	Cavalry and artillery of cavalry divisions.	. 85 (0. 16)	. 90 (0. 17)	. 95 (0. 18)	
	Other branches....	. 20 (0. 04)	. 25 (0. 05)	. 30 (0. 06)	

Continued salaries.—Officials and employees of the State, when mobilized, have their civil salaries continued wholly or in part according to their army grade. If for those provided in the army with the grade either of officer or of noncommissioned officer the military pay is less than the civil, the difference between the two is added from the civil salary; if the military pay is higher than their civil salary, they do not draw the civil salary at all. Those who are serving as privates in the army are entitled to the whole of their civil salary which, as stated above, they may assign wholly or in part for direct payment to their families.¹

As Government pay is continued under certain conditions, so certain private employers appear to have continued the salaries of those of their workers called to the army. The Government does not supervise such moneys in any way but has ruled that a separation allowance can not be drawn by the family of a soldier enjoying a continued salary, either State or private.²

SEPARATION ALLOWANCE.

Of the official resources the chief substitute for the breadwinner's regular earnings is the separation allowance, established in time of peace for a limited class and extended gradually from the outbreak of the war to cover, first, all needy families of enlisted men—whether French living in France, the colonies, or abroad, or those of allied nations living in France whose breadwinners have joined their own or the French colors³—and, second, “all needy French families residing

¹ Law Aug. 5, 1914 (J. O. Aug. 6, 1914).² Ministerial circular Oct. 10, 1914 (J. O. Oct. 11, 1914).³ Law Aug. 5, 1914 (J. O. Aug. 6, 1914); decree Sept. 15, 1914 (J. O. Sept. 20, 1914); decree Aug. 14, 1914 (J. O. Aug. 15, 1914).

in France whose breadwinner—not a soldier—is, without fault of his own, a victim of a circumstance of war suffered on French soil in a region occupied by the French Army.”¹ The allowance, fixed by the earlier peace legislation at three-fourths of a franc (14.4 cents) a day, with an additional allowance of one-fourth franc (4.9 cents) for each dependent child under 16 years of age, was in 1913 raised to 1 franc 25 centimes (24 cents) for the chief allowance (at which rate it still continues) and to 50 centimes (10 cents) per child for the additional allowance. In 1917 this additional allowance was raised to 75 centimes (14.4 cents) and extended to include ascendants who, before mobilization, were dependent on the soldier.²

The allowance fund is charged on the budget of the military depot in which the soldier is registered. It is administered by special commissions (one or more in each canton) consisting of three members appointed by the prefect. These cantonal commissions decide on the merits of cases transmitted to them by the mayors, who receive direct applications from the families claiming the allowance and forward them to the cantonal commission together with a statement of the economic condition and size of the family and a copy of their tax receipt, on which their right of application is based.³

The decisions of the cantonal commissions go into effect at once, but are open to appeal either by the claimant (if rejected) or by the subprefect (if the grant appears to him to have been unjustly given) before a commission of five members appointed by the prefect and meeting at the chief town of the district.

Above these local commissions of appeal stands the superior commission appointed by the minister of the interior as a last court of appeal. This commission, consisting at first of 31 members, was later increased to 50 and finally 100.⁴ With them are associated a number of judge advocates and a special representative of the Government and his deputy. The commission sits either in sectional groups (of which there are 10) to consider cases assigned to them by the president of the commission, or in general assembly, which deliberates upon matters referred to it by the Government representatives, or by a particular section, or upon matters which the president has reserved to be judged in the committee of the whole.⁵ Every three months the president sends to the minister of the interior a report of the commission's work.

¹ Law Apr. 28, 1916 (J. O. Apr. 30, 1916); law Mar. 21, 1905, art. 22 (J. O. Mar. 23, 1905); law Apr. 8, 1910 (J. O. Apr. 10, 1910).

² Law Aug. 7, 1913 (Bull. du min. du travail, Vol. XX, p. 72*); law Mar. 31, 1917 (J. O. Apr. 1, 1917); law Aug. 8, 1913 (Bull. du min. du travail, Vol. XX, p. 74*); ministerial circular Aug. 4, 1914 (J. O. Aug. 6, 1914).

³ Decree Aug. 2, 1914 (J. O. Aug. 3, 1914).

⁴ Law Dec. 26, 1914 (Dalloz, II, p. 244); decree Dec. 31 1914 (Dalloz, III, p. 9); decree Feb. 18, 1915 (Dalloz, III, p. 198).

⁵ Decree Dec. 31, 1914 (Dalloz, III, p. 9).

The object of the separation allowance is plainly to prevent want during the breadwinner's absence, not to supply the customary family income. From the first there appears to have been difficulty in making just decisions as to recipients, and the matter is the subject of a number of ministerial circular letters to the subprefects. "Needy" families are described as those "whom the absence of one of their number has deprived of the necessary means of subsistence." Specifically excluded are those families "whose means of existence have been reduced but remain sufficient. Judgment (in regard to eligibility and need) should always be made in a large spirit of humanity, and the applicant given the benefit of the doubt."¹ For instance, "the fact of owning a little house or a bit of ground, of paying a few francs land tax, or a small license, or the fact of being a farmer either on shares or as tenant, does not exclude an applicant for allowance without investigation."² But these words are qualified in the same circular letter by a warning to the prefect that the application of the law has led to mistakes and abuses and that "while the law should be applied in a large spirit of humanity, every effort should at the same time be made to avoid waste and to keep a rigorous control over the moneys of the State."³ A special perplexity arose when the question of labor supply became acute and the prefects are specially enjoined to make it clear that women need not fear the loss of their allowances by becoming wage-earners in agriculture or in factories.⁴

MATERNITY BENEFITS.

The claim of a newborn child for an additional allowance starts from the day of birth. A bill for the inclusion of an unborn child has failed to become law, but quite recently the maternity benefit hitherto granted to women working for wages outside their homes has been extended to all French women drawing separation allowance and to all refugees receiving special government aid. This allowance of from 50 centimes (10 cents) minimum to 1 franc 50 centimes (29 cents) maximum a day extends over a period of eight weeks, with an extra daily allowance of 50 centimes (10 cents) after confinement to those mothers who nurse their children.⁵

¹ Interministerial circular Aug. 23, 1914 (J. O. Aug. 25, 1914).

² Ministerial circular Oct. 10, 1914 (Dalloz, I, p. 221).

³ Minister of interior, reply to question No. 2983 (J. O., July 7, 1915).

⁴ Ministerial circular May, 1916 (Bull. des Usines de Guerre, 1916, p. 31); ministerial circular Jan. 8, 1915 (J. O., Jan. 12, 1915).

⁵ Law June 17, 1913 (J. O., June 19, 1913); law Jan. 23, 1917 (J. O., Jan. 23, 1917); law July 30, 1913, art. 69 (J. O., July 31, 1913).

INDEMNITY FOR LARGE FAMILIES.

This indemnity was established not as war relief but as encouragement to citizens of the poorer class generally in the rearing of large families. The annual grant is 60 francs (\$11.58) minimum to 90 francs (\$17.37) maximum, for each child under 13 years of age in excess of 3 under 13 if both parents care for them together; in excess of 2 under 13 if cared for by father alone; in excess of 1 under 13 if cared for by mother alone. It is given only to needy families and may be received in addition to the separation allowance. The rate in each case is fixed by the local authorities, and at the discretion of the administering officer the allowance may be paid wholly or in part in rent or in kind through the local bureau of charities.¹

INDEMNITY FOR DEPENDENT CHILDREN.

This was established first as a military grant to officers (up to the grade of major), military employees, noncommissioned officers, corporals, and soldiers serving beyond their required term, and to the equivalent grades in the Navy. It was recently extended to civil functionaries as well. The grant is 200 francs (\$38.60) a year for each dependent child under 16 years in excess of 2 children of whatever age.² It may be assigned through the pay office, either voluntarily on the part of the soldier or during hostilities by official authority, to the wife or other person proving that she has charge of the soldier's children. If such official assignment is made, the soldier can not repudiate it.³

MILITARY PENSIONS AND DISABILITY ALLOWANCES.

The pension system of France is at present undergoing a thorough revision by the bill introduced on November 4, 1915.⁴ On July 21, 1916, the bill was the subject of an exhaustive report to the Chamber of Deputies by an extraparlimentary commission, which recommended the bill with certain important additions and amendments.⁵ Although presented in this amended form nearly a year ago it has apparently not yet been adopted into law.

The present pension law is based upon the old law of 1831, modified only slightly from time to time, and that rather in the matter of rates and in a widening of its application (e. g., to native and colonial troops) than in its fundamental plan.⁶

¹ Law July 14, 1913 (J. O., July 15 and 16, 1913).

² Law Dec. 30, 1913 (J. O., Dec. 31, 1913); decree Aug. 26, 1914 (Dalloz, suppl. 1-2, p. 52); decree Dec. 15, 1914 (Dalloz, suppl. 1-2, p. 210).

³ Law Oct. 5, 1915 (Dalloz, VI, p. 255).

⁴ J. O., ch. dép. doc., 1915, Annexe 1410, p. 1140.

⁵ J. O., ch. dép. doc., sess. ord., 1916, vol. 3, Annexe 2383, p. 1934.

⁶ Law Apr. 11 (Army), 1831, and law Apr. 18 (Navy), 1831 (Bull. des Lois, 9th series, No. 81, pp. 161-176, 233-247).

The right to a minimum pension for length of service comes to officers and enlisted men in the army and navy after an active service of 30 or 25 years, according to the corps and grade. In computing service, years of campaign count double. Beyond the minimum the pension is augmented by a yearly increase for service beyond 30 or 25 years, the maximum being reached at 50 or 45 years of service. Retirement on a proportional pension may be taken by those below the grade of officer after 15 years, but this carries no right to the widow or orphans in case of death.¹

DISABILITY PENSIONS.

The disability pension is merely an anticipation of the retirement pension, the rate being the minimum or maximum of the retirement pension with a bonus for certain exceptional afflictions. The wound or infirmity on which the claim is based must have come from the events of war or from accidents experienced while on duty under orders (*service commandé*). The disability must be incurable and must involve at least 60 per cent reduction in earning power, as measured by the official guide scale.² (See Guide Barême, p. 63.)

Disabilities are grouped into six classes or four grades:³ (1) The amputation of two limbs or total loss of sight, recompensed by a bonus of 20 per cent for officers, 30 per cent for noncommissioned officers and privates, over and above the maximum retirement pension; (2) The amputation of one limb or the loss of the use of two limbs, recompensed by the maximum retirement pension; (3) The loss of use of one limb or an equivalent disability, recompensed by the minimum retirement pension augmented by the annual increase of the soldier's grade for each year of service or campaign; (4) Lesser wounds or infirmities pronounced incurable and equal to a disability of at least 60 per cent, judged by the official disability scale. This class is also recompensed by the minimum retirement pension augmented by the annual increase of the soldier's grade for each year of service over and above 30 or 25 years. In the case of an officer he must be adjudged incapacitated for further service; in the case of a noncommissioned officer or private, incapacitated for self-support as well.⁴

¹ Laws Apr. 11 and 18, 1831, art. 1; law Apr. 26, 1856; law Apr. 9, 1914.

² Laws Apr. 11 and 18, 1831, art. 12; circular minister of war, Mar. 3, 1906.

³ Laws Apr. 11 and 18, 1831, art. 15-17; Laws June 25 and 26, 1861, art. 4.

⁴ Laws Apr. 11 and 18, 1831, art. 14.

I. COMMISSIONED OFFICERS

[A. Present schedule. B. Schedule of bill introduced Nov. 4, 1915. C. Amendments proposed by the Commission, July 21, 1916.]

[Amounts outside of parentheses in francs; amounts inside of parentheses in dollars.]

Grade.		Retirement pensions for length of service. ¹			Pensions for 10 classes of disability. ²		
Army.	Navy.	Minimum, after 30 years.	Yearly increase.	Maximum, after 50 years.	First class, 100 per cent.	Second class, 90 per cent.	Third class, 80 per cent.
General of division.	Vice admiral . A	7,000 (1,351.00)	175 (33.78)	10,500 (2,026.50)	12,600 (2,431.80)	.....	10,500 (2,026.50)
	B	(1)	(1)	(1)	12,600 (2,431.80)	.....	10,500 (2,026.50)
	C	(1)	(1)	(1)	12,600 (2,431.80)	11,550 (2,229.15)	10,500 (2,026.50)
General of brigade	Rear admiral . A	6,000 (1,158.00)	100 (19.30)	8,000 (1,544.00)	9,600 (1,852.80)	.....	8,000 (1,544.00)
	B	(1)	(1)	(1)	9,600 (1,852.80)	.....	8,000 (1,544.00)
	C	(1)	(1)	(1)	9,600 (1,852.80)	8,800 (1,698.40)	8,000 (1,544.00)
Colonel.....	Captain (de vaisseau). A	4,500 (868.50)	75 (14.48)	6,000 (1,158.00)	7,200 (1,389.60)	.....	6,000 (1,158.00)
	B	(1)	(1)	(1)	7,200 (1,389.60)	.....	6,000 (1,158.00)
	C	(1)	(1)	(1)	7,200 (1,389.60)	6,600 (1,273.80)	6,000 (1,158.00)
Lieutenant colonel.	Commander (captain de frigate). A	3,700 (714.10)	65 (12.55)	5,000 (965.00)	6,000 (1,158.00)	.....	5,000 (965.00)
	B	(1)	(1)	(1)	6,000 (1,158.00)	.....	5,000 (965.00)
	C	(1)	(1)	(1)	6,000 (1,158.00)	5,500 (1,061.50)	5,000 (965.00)
Major.....	Corvette captain. A	3,000 (579.00)	50 (9.65)	4,000 (772.00)	4,800 (926.40)	.....	4,000 (772.00)
	B	(1)	(1)	(1)	4,800 (926.40)	.....	4,000 (772.00)
	C	(1)	(1)	(1)	5,025 (969.83)	4,400 (849.20)	4,000 (772.00)

¹ The retirement pension is not discussed in the proposed new law.

² Disability pensions are granted only for incurable disabilities. The four classes established in the law of 1831 and retained to the present time give the 100 per cent pension to classes (1) and (2) (of the Guide Barème, p. 63), 80 per cent pension to classes (3) and (4), and 60 per cent pension to classes (5) and (6). Less severe permanent disabilities graded by the old law at 50 per cent or less do not receive pension, but a renewable allowance. The grades of pensionable disabilities are increased to 8 in the proposed law, as it was introduced, and to 10 in the recommendations of the commission, as here shown on lines B and C, respectively. The proposed law adds to the pensions of disabled men up to the grade of major, an extra allowance for each child under 16; the rate is the same for all military ranks and amounts to 100 francs (\$19.30) yearly if the father is receiving a 100 per cent pension, and 10 francs (\$1.93) yearly if he is receiving a 10 per cent pension, with intermediate rates in proportion. Temporary disability is met for officers in "non-activity" with "disability pay" and for noncommissioned officers and privates with renewable and permanent allowances (gratifications). See Schedule 13, p. 58.

³ Widow: Marriage must antedate wound or infirmity leading to husband's death.

Orphan: Legitimate children only, including those of a former marriage (old law); illegitimate children also, if recognized voluntarily or by action of the courts (new proposed law).

By the bill of Nov. 4, 1915, a widow's pension carries a uniform extra allowance of 100 francs (\$19.30) for each child under 16 years. If the mother is not living the orphans receive the additional allowance for all but the eldest.

France. Military pensions.

AND THEIR DEPENDENTS.

[A. Present schedule. B. Schedule of bill introduced Nov. 4, 1915. C. Amendments proposed by the Commission, July 21, 1916.]

[Amounts outside of parentheses in francs; amounts inside of parentheses in dollars.]

Pensions for 10 classes of disability ² —Continued.							Pensions to widows and full orphans. ³	
Fourth class, 70 per cent.	Fifth class, 60 per cent.	Sixth class, 50 per cent.	Seventh class, 40 per cent.	Eighth class, 30 per cent.	Ninth class, 20 per cent.	Tenth class, 10 per cent.	Normal: One-half maximum retirement.	Exceptional: Three-fourths maximum retirement.
	7,000 (1,351.00)						3,500 (675.50)	5,250 (1,013.25)
	8,167 (1,576.23)	7,000 (1,351.00)	5,600 (1,080.80)	4,200 (810.60)	2,800 (540.40)	1,400 (270.20)	3,500 (675.50)	5,250 (1,013.25)
8,750 (1,688.75)	7,000 (1,351.00)	5,833 (1,125.77)	4,667 (900.73)	3,500 (675.50)	2,333 (450.27)	1,167 (225.23)	3,500 (675.50)	5,250 (1,013.25)
	6,000 (1,158.00)						2,667 (514.73)	4,000 (772.00)
	6,667 (1,286.73)	6,000 (1,158.00)	4,808 (927.94)	3,600 (694.80)	2,400 (463.20)	1,200 (231.60)	2,667 (514.73)	4,000 (772.00)
7,000 (1,351.00)	6,000 (1,158.00)	5,000 (965.00)	4,000 (772.00)	3,000 (579.00)	2,000 (386.00)	1,000 (193.00)	2,667 (514.73)	4,000 (772.00)
	4,500 (868.50)						2,000 (386.00)	3,000 (579.00)
	5,000 (965.00)	4,500 (868.50)	3,600 (694.80)	2,700 (521.10)	1,800 (347.40)	900 (173.70)	2,000 (386.00)	3,000 (579.00)
5,250 (1,013.25)	4,500 (868.50)	3,750 (723.75)	3,000 (579.00)	2,250 (434.25)	1,500 (289.50)	750 (144.75)	2,000 (386.00)	3,000 (579.00)
	3,700 (714.10)						1,667 (321.73)	2,500 (482.50)
	4,133 (797.67)	3,700 (714.10)	2,960 (571.28)	2,220 (428.46)	1,480 (285.64)	740 (142.82)	1,667 (321.73)	2,500 (482.50)
4,350 (839.55)	3,700 (714.10)	3,083 (595.02)	2,467 (476.13)	1,850 (357.05)	1,233 (237.97)	617 (119.08)	1,667 (321.73)	2,500 (482.50)
	3,000 (579.00)						1,333 (257.27)	2,000 (386.00)
	3,333 (643.27)	3,000 (579.00)	2,400 (463.20)	1,800 (347.40)	1,200 (231.60)	600 (115.80)	1,333 (257.27)	2,000 (386.00)
3,500 (675.50)	3,000 (579.00)	2,500 (482.50)	2,000 (386.00)	1,500 (289.50)	1,000 (193.00)	500 (96.50)	1,333 (257.27)	2,000 (386.00)

Right to pension for widow and orphan (full orphans (minor) enjoy same pension rights as widow and on her death inherit her rights. As each child becomes of age (21 years) his share passes to the remaining minors):

- Old law—
- (1) If soldier is killed on field of battle, or from wounds received there—exceptional pension.
 - (2) If soldier is killed on duty under orders or from wounds received on duty under orders—normal pension.
 - (3) If death is caused by endemic or contagious disease contracted in service—normal pension.
 - (4) If soldier died in enjoyment of retirement or disability pension, or in possession or rights to either—normal pension.

Proposed law—

Proposed law extends exceptional pension to (2) and enlarges (3) to include maladies—whatever their nature—contracted in the course of dangers, accidents or fatigues of war. It also extends right of pension to widows and orphans of soldiers having curable disabilities of the first five classes (at least 60 per cent disability) who die in enjoyment of renewable allowances or in possession of rights to them. It provides that the special children's allowance granted on behalf of children under 16 to fathers receiving pension in the five lower classes of disabilities (which do not entitle to reversion of pension to widow and orphans) shall continue after the father's death at the same rate until the child is 16 years of age.

⁴ Rate for total blindness and loss of two limbs was raised to amount given in C on July 6, 1917. (J.O., July 6, 1917.)

1. COMMISSIONED OFFICERS

Grade.			Retirement pensions for length of service. ¹			Pensions for 10 classes of disability. ²			
Army.	Navy.		Minimum, after 30 years.	Yearly increase.	Maximum, after 50 years.	First class, 100 per cent.	Second class, 90 per cent.	Third class, 80 per cent.	
Captain	Lieutenant..	Fourth grade.	A	2,900 (559.70)	50 (9.65)	3,900 (752.70)	4,680 (903.24)	.....	3,900 (752.70)
			B	(1)	(1)	(1)	4,680 (903.24)	.....	3,900 (752.70)
			C	(1)	(1)	(1)	4,905 (946.67)	4,290 (827.97)	3,900 (752.70)
		Third grade.	A	2,700 (521.10)	50 (9.65)	3,700 (714.10)	4,440 (956.92)	.....	3,700 (714.10)
			B	(1)	(1)	(1)	4,440 (956.92)	.....	3,700 (714.10)
			C	(1)	(1)	(1)	4,665 (900.35)	4,070 (785.51)	3,700 (714.10)
		Second grade.	A	2,500 (482.50)	50 (9.65)	3,500 (675.50)	4,200 (810.60)	.....	3,500 (675.50)
			B	(1)	(1)	(1)	4,200 (810.60)	.....	3,500 (675.50)
			C	(1)	(1)	(1)	4,425 (854.03)	3,859 (744.79)	3,500 (675.50)
		First grade.	A	2,300 (443.90)	50 (9.65)	3,300 (636.90)	3,960 (761.28)	.....	3,300 (636.90)
			B	(1)	(1)	(1)	3,960 (761.28)	.....	3,300 (636.90)
			C	(1)	(1)	(1)	4,185 (807.71)	3,630 (700.59)	3,300 (636.90)
First lieutenant.	Ensign, first class.	Fourth grade.	A	2,300 (443.90)	50 (9.65)	3,300 (636.90)	3,960 (761.28)	.....	3,300 (636.90)
			B	(1)	(1)	(1)	3,960 (761.28)	.....	3,300 (636.90)
			C	(1)	(1)	(1)	4,185 (807.71)	3,630 (700.59)	3,300 (636.90)
		Third grade.	A	2,150 (414.95)	50 (9.65)	3,150 (607.95)	3,780 (729.54)	.....	3,150 (607.95)
			B	(1)	(1)	(1)	3,780 (729.54)	.....	3,150 (607.95)
			C	(1)	(1)	(1)	4,005 (772.97)	3,465 (668.75)	3,150 (607.95)
		Second grade.	A	2,000 (386.00)	50 (9.65)	3,000 (579.00)	3,600 (694.80)	.....	3,000 (579.00)
			B	(1)	(1)	(1)	3,600 (694.80)	.....	3,000 (579.00)
			C	(1)	(1)	(1)	3,825 (738.23)	3,300 (636.90)	3,000 (579.00)
		First grade.	A	1,850 (357.05)	50 (9.65)	2,850 (550.05)	3,420 (660.06)	.....	2,850 (550.05)
			B	(1)	(1)	(1)	3,420 (660.06)	.....	2,850 (550.05)
			C	(1)	(1)	(1)	3,645 (703.49)	3,135 (605.06)	2,850 (550.05)
Second lieutenant.	Ensign, second class.	Second grade.	A	1,800 (347.40)	50 (9.65)	2,800 (540.40)	3,360 (648.48)	.....	2,800 (540.40)
			B	(1)	(1)	(1)	3,360 (648.48)	.....	2,800 (540.40)
			C	(1)	(1)	(1)	3,585 (691.91)	3,060 (594.44)	2,800 (540.40)
		First grade.	A	1,500 (289.50)	40 (7.72)	2,300 (443.90)	2,760 (532.68)	.....	2,300 (443.90)
			B	(1)	(1)	(1)	2,760 (532.68)	.....	2,300 (443.90)
			C	(1)	(1)	(1)	2,985 (576.11)	2,530 (488.29)	2,300 (443.90)

For footnotes, see pp. 52 and 53.

France. Military pensions—Continued.

AND THEIR DEPENDENTS—Continued.

Pensions for 10 classes of disability ² —Continued.							Pensions to widows and full orphans. ³	
Fourth class, 70 per cent.	Fifth class, 60 per cent.	Sixth class, 50 per cent.	Seventh class, 40 per cent.	Eighth class, 30 per cent.	Ninth class, 20 per cent.	Tenth class, 10 per cent.	Normal: One-half maximum retirement.	Exceptional: Three-fourths maximum retirement.
	2,900 (559.70)						1,300 (250.90)	1,950 (376.35)
	3,233 (623.97)	2,900 (559.70)	2,320 (447.76)	1,740 (335.82)	1,160 (223.88)	580 (111.94)	1,300 (250.90)	1,950 (376.35)
3,400 (656.20)	2,900 (559.70)	2,417 (466.48)	1,933 (373.07)	1,450 (279.85)	967 (186.63)	483 (93.22)	1,300 (250.90)	1,950 (376.35)
	2,700 (521.10)						1,233 (237.97)	1,850 (357.05)
	3,033 (585.37)	2,700 (521.10)	2,160 (416.88)	1,620 (312.66)	1,080 (208.44)	540 (104.22)	1,233 (237.97)	1,850 (357.05)
3,200 (617.60)	2,700 (521.10)	2,250 (434.25)	1,800 (347.40)	1,350 (260.55)	900 (173.70)	450 (86.85)	1,233 (237.97)	1,850 (357.05)
	2,500 (482.50)						1,167 (225.23)	1,750 (337.75)
	2,833 (546.77)	2,500 (482.50)	2,000 (386.00)	1,500 (289.50)	1,000 (193.00)	500 (96.50)	1,167 (225.23)	1,750 (337.75)
3,000 (579.00)	2,500 (482.50)	2,083 (402.02)	1,667 (321.73)	1,250 (241.25)	833 (160.77)	417 (80.48)	1,167 (225.23)	1,750 (337.75)
	2,300 (443.90)						1,100 (212.30)	1,650 (318.45)
	2,633 (508.17)	2,300 (443.90)	1,840 (355.12)	1,380 (266.34)	920 (177.56)	460 (88.78)	1,100 (212.30)	1,650 (318.45)
2,800 (540.40)	2,300 (443.90)	1,917 (369.98)	1,533 (295.87)	1,150 (221.95)	767 (148.03)	383 (73.92)	1,100 (212.30)	1,650 (318.45)
	2,300 (443.90)						1,100 (212.30)	1,650 (318.45)
	2,633 (508.17)	2,300 (443.90)	1,840 (355.12)	1,380 (266.34)	920 (177.56)	460 (88.78)	1,100 (212.30)	1,650 (318.45)
2,800 (540.40)	2,300 (443.90)	1,917 (369.98)	1,533 (295.87)	1,150 (221.95)	767 (148.03)	383 (73.92)	1,100 (212.30)	1,650 (318.45)
	2,150 (414.95)						1,050 (202.65)	1,575 (303.98)
	2,483 (479.22)	2,150 (414.95)	1,720 (331.96)	1,290 (248.97)	860 (165.98)	430 (82.99)	1,050 (202.65)	1,575 (303.98)
2,650 (511.45)	2,150 (414.95)	1,792 (345.86)	1,433 (276.57)	1,075 (207.48)	717 (138.38)	358 (69.09)	1,050 (202.65)	1,575 (303.98)
	2,000 (386.00)						1,000 (193.00)	1,500 (289.50)
	2,333 (450.27)	2,000 (386.00)	1,600 (308.80)	1,200 (231.60)	800 (154.40)	400 (77.20)	1,000 (193.00)	1,500 (289.50)
2,500 (482.50)	2,000 (386.00)	1,667 (321.73)	1,333 (257.27)	1,000 (193.00)	667 (128.73)	333 (64.27)	1,000 (193.00)	1,500 (289.50)
	1,850 (357.05)						950 (183.35)	1,425 (275.03)
	2,183 (421.32)	1,850 (357.05)	1,480 (285.64)	1,110 (214.23)	740 (142.82)	370 (71.41)	950 (183.35)	1,425 (275.03)
2,350 (453.55)	1,850 (357.05)	1,542 (297.61)	1,233 (237.97)	925 (178.53)	617 (119.08)	398 (76.81)	950 (183.35)	1,425 (275.03)
	1,800 (347.40)						933 (180.07)	1,400 (270.20)
	2,133 (411.67)	1,800 (347.40)	1,440 (277.92)	1,080 (208.44)	720 (138.96)	360 (69.48)	933 (180.07)	1,400 (270.20)
2,300 (443.90)	1,800 (347.40)	1,500 (289.50)	1,200 (231.60)	900 (173.70)	600 (115.80)	300 (57.90)	933 (180.07)	1,400 (270.20)
	1,500 (289.50)						767 (148.03)	1,150 (221.95)
	1,767 (341.03)	1,500 (289.50)	1,200 (231.60)	900 (173.70)	600 (115.80)	300 (57.90)	767 (148.03)	1,150 (221.95)
1,900 (366.70)	1,500 (289.50)	1,250 (241.25)	1,000 (193.00)	750 (144.75)	500 (96.50)	250 (48.25)	767 (148.03)	1,150 (221.95)

SCHEDULE 12.—*France*

II. NONCOMMISSIONED OFFICERS AND

[A. Present schedule. B. Schedule of bill introduced Nov. 4, 1915.

[Amounts outside of parentheses in francs; amounts inside of parentheses in dollars.]

Grade.		Retirement pensions for length of service. ¹			Pensions for 10 classes of disability. ²		
Army.	Navy.	Minimum, after 25 years.	Yearly increase.	Maximum, after 45 years.	First class, 100 per cent.	Second class, 90 per cent.	Third class, 80 per cent.
Chief adjutant. A	.....	1, 100 (212. 30)	15 (2. 90)	1, 400 (270. 20)	* 1, 820 (351. 26)	.....	1, 400 (270. 20)
B	.....	(1)	(1)	(1)	1, 820 (351. 26)	.....	1, 400 (270. 20)
C	.....	(1)	(1)	(1)	2, 045 (394. 69)	1, 650 (318. 45)	1, 466. 66 (283. 07)
Adjutant..... A	.....	1, 000 (193. 00)	15 (2. 90)	1, 300 (250. 90)	* 1, 690 (328. 17)	.....	1, 300 (250. 90)
B	.....	(1)	(1)	(1)	1, 690 (328. 17)	.....	1, 300 (250. 90)
C	.....	(1)	(1)	(1)	1, 915 (369. 60)	1, 500 (289. 50)	1, 333. 33 (257. 33)
"Aspirant".... A	.....	950 (183. 35)	15 (2. 90)	1, 250 (241. 25)	* 1, 625 (313. 63)	.....	1, 250 (241. 25)
B	.....	(1)	(1)	(1)	1, 625 (313. 63)	.....	1, 250 (241. 25)
C	.....	(1)	(1)	(1)	1, 850 (357. 05)	1, 425 (275. 03)	1, 266. 66 (244. 47)
Sergeant major. A	.....	900 (173. 70)	15 (2. 90)	1, 200 (231. 60)	* 1, 560 (301. 08)	.....	1, 200 (231. 60)
B	.....	(1)	(1)	(1)	1, 560 (301. 08)	.....	1, 200
C	.....	(1)	(1)	(1)	1, 785 (344. 51)	1, 350 (260. 55)	1, 200
Sergeant..... A	.....	800 (154. 40)	15 (2. 90)	1, 100 (212. 30)	* 1, 430 (275. 99)	.....	1, 100 (212. 30)
B	.....	(1)	(1)	(1)	1, 430 (275. 99)	.....	1, 100
C	.....	(1)	(1)	(1)	1, 655 (319. 42)	1, 237. 50 (238. 84)	1, 100
Corporal.....	Quartermaster A	700 (135. 10)	10 (1. 93)	900 (173. 70)	* 1, 170 (225. 81)	.....	900 (173. 70)
	B	(1)	(1)	(1)	1, 170 (225. 81)	.....	900 (173. 70)
	C	(1)	(1)	(1)	1, 395 (269. 24)	1, 050 (202. 65)	933. 33 (180. 13)
Soldier.....	Sailor..... A	600 (115. 80)	7. 50 (1. 45)	750 (144. 75)	* 975 (188. 18)	.....	750 (144. 75)
	B	(1)	(1)	(1)	975 (188. 18)	.....	750 (144. 75)
	C	(1)	(1)	(1)	1, 200 (231. 60)	900 (173. 70)	800 (154. 40)
	Chief mate.... A	1, 234 (238. 16)	15 (2. 90)	1, 534 (296. 06)	* 2, 665 (514. 35)	.....	2, 050 (395. 65)
	B	(1)	(1)	(1)	2, 665 (514. 35)	.....	2, 050
	C	(1)	(1)	(1)	2, 800 (540. 40)	2, 357. 50 (455. 00)	2, 050
	Mate..... A	1, 234 (238. 16)	15 (2. 90)	1, 534 (296. 06)	* 2, 340 (451. 62)	.....	1, 800 (347. 40)
	B	(1)	(1)	(1)	2, 340 (451. 62)	.....	1, 800
	C	(1)	(1)	(1)	2, 565 (495. 05)	2, 070 (399. 51)	1, 800
	Second mate.. A	1, 200 (231. 60)	15 (2. 90)	1, 500 (289. 50)	* 1, 950 (376. 35)	.....	1, 500 (289. 50)
	B	(1)	(1)	(1)	1, 950 (376. 35)	.....	1, 500
	C	(1)	(1)	(1)	2, 175 (419. 78)	1, 725 (332. 93)	1, 500

For footnotes, see pp. 52 and 53.

Military pensions—Continued.

PRIVATES AND THEIR DEPENDENTS.

C. Amendments proposed by the Commission, July 21, 1916.]

[Amounts outside of parentheses in francs; amounts inside of parentheses in dollars.]

Pensions for 10 classes of disability ¹ —Continued.							Pensions to widows and full orphans. ²	
Fourth class, 70 per cent.	Fifth class, 60 per cent.	Sixth class, 50 per cent.	Seventh class, 40 per cent.	Eighth class, 30 per cent.	Ninth class, 20 per cent.	Tenth class, 10 per cent.	Normal: One-half maximum retirement.	Exceptional: Three-fourths maximum retirement.
.....	1,100	916.65	733.33	550	366.66	183.33	700	1,050
.....	(212.30)	(176.91)	(141.53)	(106.15)	(70.77)	(35.38)	(135.10)	(202.65)
.....	1,200	1,100	880	660	440	220	700	1,050
.....	(231.60)	(212.30)	(169.84)	(127.38)	(84.92)	(42.46)	.....	.....
283.33	1,100	916.65	733.33	550	366.66	183.33	700	1,050
(247.68)	(212.30)	(176.91)	(141.53)	(106.15)	(70.77)	(35.38)	.....	.....
.....	1,000	833.33	666.66	500	333.33	166.66	650	975
.....	(193.00)	(160.83)	(128.67)	(96.50)	(64.33)	(32.17)	(125.45)	(188.18)
.....	1,100	1,000	800	600	400	200	650	975
.....	(212.30)	(193.00)	(154.40)	(115.80)	(77.20)	(38.60)	.....	.....
1,166.66	1,000	833.33	666.66	500	333.33	166.66	650	975
(225.17)	(193.00)	(160.83)	(128.67)	(96.50)	(64.33)	(32.17)	.....	.....
.....	950	791.65	633.33	475	316.66	158.33	625	937
.....	(183.35)	(152.79)	(122.23)	(91.68)	(61.12)	(30.56)	(120.63)	(180.84)
.....	1,050	950	760	570	380	190	625	937
.....	(202.65)	(183.35)	(146.68)	(110.01)	(73.34)	(36.67)	.....	.....
1,108.33	950	791.65	633.33	475	316.66	158.33	625	937
(209.01)	(183.35)	(152.79)	(122.23)	(91.68)	(61.12)	(30.56)	.....	.....
.....	900	750	600	450	300	150	600	900
.....	(173.70)	(144.75)	(115.80)	(86.85)	(57.90)	(28.95)	(115.80)	(173.70)
.....	1,000	900	720	540	360	180	600	900
.....	(193.00)	(173.70)	(138.96)	(104.22)	(69.48)	(34.74)	.....	.....
1,050	900	750	600	450	300	150	600	900
(202.65)	(173.70)	(144.75)	(115.80)	(86.85)	(57.90)	(28.95)	.....	.....
.....	800	666.66	533.33	400	266.66	133.33	550	825
.....	(154.40)	(128.67)	(102.93)	(77.20)	(51.47)	(25.73)	(106.15)	(159.23)
.....	900	800	640	480	320	160	550	825
.....	(173.70)	(154.40)	(123.52)	(92.64)	(61.76)	(30.88)	.....	.....
962.50	825	687.50	550	412.50	275	137.50	550	825
(185.76)	(159.23)	(132.69)	(106.15)	(79.61)	(53.08)	(26.54)	.....	.....
.....	700	583.33	466.66	350	233.33	116.66	450	675
.....	(135.10)	(112.58)	(90.07)	(67.55)	(45.03)	(22.52)	(86.85)	(130.28)
.....	767	700	560	420	280	140	450	675
.....	(148.03)	(135.10)	(108.08)	(81.06)	(54.04)	(27.02)	.....	.....
816.66	700	583.33	466.66	350	233.33	116.66	500	675
(157.62)	(135.10)	(112.58)	(90.07)	(67.55)	(45.03)	(22.52)	(96.50)	.....
.....	600	500	400	300	200	100	375	563
.....	(115.80)	(96.50)	(77.20)	(57.90)	(38.60)	(19.30)	(72.38)	(108.66)
.....	650	600	480	360	240	120	375	563
.....	(125.45)	(115.80)	(92.64)	(69.48)	(46.32)	(23.16)	.....	.....
700	600	500	400	300	200	100	460	563
(135.10)	(115.80)	(96.50)	(77.20)	(57.90)	(38.60)	(19.30)	(² 88.78)	(²)
.....	1,450	1,208.33	966.66	725	483.33	241.66	767	1,150
.....	(279.85)	(233.21)	(186.57)	(139.93)	(93.28)	(46.64)	(148.03)	(221.95)
.....	1,650	1,450	1,160	870	580	290	767	1,150
.....	(318.45)	(279.85)	(223.88)	(167.91)	(111.94)	(55.97)	.....	.....
1,750	1,450	1,208.33	966.66	725	483.33	241.66	767	1,150
(337.75)	(279.85)	(233.21)	(186.57)	(139.93)	(93.28)	(46.64)	.....	.....
.....	1,300	1,083.33	866.66	650	433.33	216.66	767	1,150
.....	(250.90)	(209.08)	(167.27)	(125.45)	(83.63)	(41.82)	(148.03)	(221.95)
.....	1,467	1,300	1,040	780	520	260	767	1,150
.....	(283.13)	(250.90)	(200.72)	(150.54)	(100.36)	(50.18)	.....	.....
1,550	1,300	1,083.33	866.66	650	433.33	216.66	767	1,150
(299.15)	(250.90)	(209.08)	(167.27)	(125.45)	(83.63)	(41.82)	.....	.....
.....	1,100	916.66	733.33	550	366.66	183.33	750	1,125
.....	(212.30)	(176.92)	(141.53)	(106.15)	(70.77)	(35.38)	(144.75)	(217.13)
.....	1,233	1,100	880	660	440	220	750	1,125
.....	(237.97)	(212.30)	(169.84)	(127.38)	(84.92)	(42.46)	.....	.....
1,300	1,100	916.66	733.33	550	366.66	183.33	750	1,125
(250.90)	(212.30)	(176.92)	(141.53)	(106.15)	(70.77)	(35.38)	.....	.....

Disabilities were loosely graded by custom and successive laws until 1879, when a commission was appointed to list the various disabilities in a scale according to their severity. This scale was adopted as a standard by both the Army and the Navy by the ministerial decisions of July 23 and November 28, 1887, and, though slightly modified in 1905 and 1907, it is still in force for the application of disability pensions. The grading is largely arbitrary, based on the need to meet the military classification rather than on a scientific measurement of the real degree of the disability.¹

ALLOWANCES FOR TEMPORARY DISABILITY.

No pension provision is made for multiple infirmities nor for incurable infirmities graded below 60 per cent disability, nor for temporary disabilities of whatever seriousness. These last two classes of invalidity are at least partially cared for in the case of officers by a provision for "inactivity for temporary disability, with disability pay (solde de réforme)"; also by their right to invalidity retirement after 25 years of service.²

For those below the grade of officer temporary disability is met by a system of allowances (gratifications), either temporary or permanent.³ (See Schedule 13, below.) These, in the present régime,

SCHEDULE 13.—*France. Schedule of indemnities (annual amounts, renewable or permanent) for temporary or minor disabilities.*^a

[Source: Decree Mar. 24, 1915 (J. O. Mar. 28, 1915).]

[Amounts outside of parentheses are in francs; amounts inside of parentheses are in dollars.]

Grades.	Allowances for curable infirmities or wounds involving at least 60 per cent disability.			Allowances for curable or incurable infirmities or wounds involving less than 60 per cent disability.				
	First class, 100 per cent.	Second class, 80 per cent.	Third class, 60 per cent.	Fourth class, 50 per cent.	Fifth class, 40 per cent.	Sixth class, 30 per cent.	Seventh class, 20 per cent.	Eighth class, 10 per cent.
Chief adjutant.....	1,820 (351.26)	1,400 (270.20)	1,100 (212.30)	910 (175.63)	730 (140.89)	550 (106.15)	368 (71.02)	184 (35.51)
Adjutant.....	1,690 (326.17)	1,300 (250.90)	1,000 (193.00)	832 (160.58)	666 (128.54)	500 (96.50)	334 (64.46)	168 (32.42)
"Aspirant".....	1,625 (313.63)	1,250 (241.25)	950 (183.35)	791 (152.66)	633 (122.17)	475 (91.68)	318 (61.37)	159 (30.69)
Sergeant major.....	1,560 (301.08)	1,200 (231.60)	900 (173.70)	750 (144.75)	600 (115.80)	450 (86.85)	300 (57.90)	150 (28.95)
Sergeant.....	1,430 (275.99)	1,100 (212.30)	800 (154.40)	666 (128.54)	533 (102.87)	400 (77.20)	268 (51.72)	134 (25.86)
Corporal.....	1,170 (225.81)	900 (173.70)	700 (135.10)	582 (112.33)	466 (89.94)	350 (67.55)	234 (45.16)	118 (22.77)
Soldier.....	975 (188.18)	750 (144.75)	600 (115.80)	500 (96.50)	400 (77.20)	300 (57.90)	200 (38.60)	100 (19.30)

^a This indemnity for temporary disability does not at present exist for officers. Their case is met by their position of "inactivity for temporary infirmities" with disability pay. (Law August 17, 1834, and Law August 17, 1879; see J. O. ch. dép. doc. 1916, p. 1947.)

¹ Commission report July 21, 1916 (J. O., ch. dép. doc., sess. ord., 1916, vol. 3, Annexe 2383, p. 1962).

² Law June 25, 1861; law Aug. 17, 1879.

³ Decree Jan. 3, 1857; decree Mar. 31, 1906; decree Mar. 24, 1915.

are quite distinct from pensions. They have been established and developed as an emergency means of meeting an evident hardship; they are granted not as a right, but as a benevolent award (*concession gracieuse*), and are therefore revocable for misconduct. They are granted first as temporary aid, renewable for two-year periods and subject to biennial medical examinations and reports. But, according to the physician's report, they may at any time be suppressed (if the disability falls below 10 per cent), converted into a permanent indemnity (for an incurable affliction causing 10 per cent to 50 per cent disability), or into a pension (if augmented to 60 per cent disability and pronounced incurable). Neither the temporary nor the permanent allowance reverts to the widow.

The amounts granted in the first three grades (temporary disability 100 per cent, 80 per cent, or 60 per cent) correspond to the pensions given in classes 1 and 2, 3 and 4, 5 and 6, respectively (in the last class, however, with the increase for extra years of service). The amounts of the grades from 50 per cent to 10 per cent, curable or incurable, are directly fixed by the decree.

The careful percentage grading and grouping of the disabilities recompensed by these special allowances necessitated a more exact listing of disabilities than that of 1887, which has been made to serve, even to the present day, for the more arbitrary classification of pension disabilities. The Government brought out in 1906 and again in 1915 a medical disability guide scale,¹ drawn up in accordance with the dicta of modern medical science and civil jurisprudence, in which infirmities are classed according to their exact scientific measurement of disability and scaled from 100 per cent to 10 per cent. The extraparliamentary commission, reporting in July, 1916, on the proposed pension law, stated that a still more minute scale was in preparation which will grade disabilities more closely and will be used for the administration of the new pension law, as well as for the special allowances.

The new law² concerning industrial reeducation and treatment of disabled soldiers passed on July 6, 1917, provides that during the period of reeducation, if the payment of the pension has not commenced, the family continues to receive the separation allowance. If the pension has been begun and if the one-twelfth part of it is less than the monthly amount of the allowance granted to the family, the difference will be given at the end of the period of reeducation. In no case can the rate of pension be reduced on account of the professional reeducation and readaptation to work.

¹ Not found among available material.

² J. O., *sén. déb.*, July 6, 1917, p. 709.

PENSION RIGHTS OF WIDOWS AND ORPHANS.

Widows and orphans have a right to a pension in the following cases: (1) When the husband or father is killed on the field of battle, or dies as a result of wounds received there; (2) when he is killed on duty under orders, or dies from wounds received thereby; (3) when he dies from diseases (endemic or contagious) contracted in service; (4) when he dies in possession of a pension or rights to a pension; (5) when legally declared "missing."¹ In this case it is given only provisionally and after a waiting period, and immediate need is met by emergency relief (*secours immédiat*) to those in receipt of official notification that the soldier has been missing at least six months. In the first case the pension is "exceptional"—one-half (officers) or three-fourths (noncommissioned officers and privates) of the amount of the maximum retirement pension.

The "normal" pension granted in the other four cases amounts to one-third (officers) or one-half (noncommissioned officers and privates) of the maximum retirement pension.

In all cases the marriage must have antedated the injury. The amount of the widow's pension is the same regardless of the existence or number of children. Minors inherit the pension, passing down their share, on coming of age, to the remaining minors. Only legitimate children are entitled to pensions. Children of a former marriage share on equal terms as individuals while the widow is living, but on the death of the widow inherit the pension in two equal parts with the children of the second marriage. No provision is at present made for ascendants.²

PROPOSED LEGISLATION.³

In discussing the new law the commission dwells on the significance of the modern army as a nation in arms, as compared with the old professional army of celibates without family responsibilities. In the new view pensions are regarded as a liquidation of social obligation and should be so planned as to make reparation as justly as possible for all the wounded, all the sick, all those dead as a result of war. At several important points, therefore, along these lines, the new law aims to correct inadequacies and injustices of the old, as follows:

1. It fixes the amount of disability pensions without regard to the pension for length of service, making them directly proportional to the injury received. (See Schedule 12, p. 52.)

¹ Laws Apr. 11 and 18, 1831, art. 19, 22; law Apr. 15, 1885; law Dec. 8, 1905; law Apr. 13, 1878, art. 38, 44; law Feb. 25, 1901, art. 48. Circular minister of war Jan. 26, 1916; law Apr. 26, 1856, art. 1; law June 20, 1878; law Aug. 18, 1879.

² Laws Apr. 11 and 18, 1831, art. 21; decision of State council, June 13, 1845 (*Recueil des Arrêts du Conseil d'Etat*, 1845, p. 353).

³ On July 6, 1917, the Senate passed the bill already passed by the Chamber of Deputies to raise the rate of military pensions in case of absolute blindness or the loss of two limbs to the amounts stated in the schedule of the proposed pension law. (J. O., July 7, 1917.)

2. It takes into consideration the matter of dependent children, and provides for extra allowances as a matter of social assistance.

3. It makes provision for illegitimate children treating them as legitimate where no widow or legitimate children exist. If these exist the illegitimate child is treated as the child of a former marriage. His position is established by recognition of parentage, either voluntary or by court action (with certain reservations, however, in regard to the sincerity of voluntary acknowledgment).

4. It gives the disability pension, not on the old basis of ability to render military service, but according to the exact degree of disability, measured by medical science and charted in a revised guide-scale. A proposal has been offered to make the workmen's compensation law of 1898 applicable to military life,¹ but the commission on pensions gives as its opinion that it would be impracticable as well as unjust to make the amount of pension for a war injury depend on the civil earning power.

5. It holds that illness of any sort contracted in war service gives legitimate claim to a pension, and it grants a pension on behalf of those "whose death is caused by a malady—whatever its nature—contracted in the course of dangers, accidents, or fatigues of service."

6. It holds that ascendants should count among dependents having a right to consideration and proposes to make provision for them in a life allowance fixed at a uniform amount regardless of grade.

SCHEDULE 14.—*France. Present and proposed provisions for ascendants.*

[Amounts outside of parentheses are in francs; amounts inside of parentheses are in dollars.]

PRESENT LAW.

(Renewable emergency aid if ascendants are needy and if soldier left neither widow nor orphan. Amount varies according to grade of soldier and age and resources of petitioner.)

Soldier.....	50- 70 (9.65-13.51)
Noncommissioned officer.....	60- 80 (11.58-15.44)
Lieutenant, first and second.....	80-100 (15.44-19.30)
Captain.....	90-120 (17.37-23.16)
Major.....	120-200 (23.16-38.60)
Lieutenant colonel, colonel.....	150-250 (28.95-48.25)
General.....	200-400 (38.60-77.20)

J. O., ch. dép. doc. sess. ord., 1916, vol. 3, p. 1967.

PROPOSED LAW OF NOVEMBER 4, 1915.

Life allowance to needy cases for:

Mother alone.....	$\frac{1}{3}$ widow's pension.
Father alone.....	$\frac{1}{3}$ widow's pension.
Mother and father.....	$\frac{1}{2}$ widow's pension.
Grandmother alone.....	$\frac{1}{4}$ widow's pension.
Grandfather alone.....	$\frac{1}{4}$ widow's pension.
Grandmother and grandfather.....	$\frac{1}{3}$ widow's pension.

¹ J. O., ch. dép. doc. sess. ord., January-April, 1914, vol. 2, p. 1801.

To receive allowance: (1) There must be no widow or orphans; (2) ascendant must be infirm and at least 60 years of age; (3) he must prove that soldier would have been his support if alive; (4) ascendant nearest in degree has the only right to allowance.

J. O., ch. dép. doc. sess. ord., 1916, vol. 3, p. 1967.

PROPOSED LAW AS MODIFIED BY THE COMMISSION.

Uniform renewable allowance regardless of grade:

Mother alone	150 (28.95)
Father alone.....	150 (28.95)
Mother and father.....	250 (48.25)
Grandmother alone.....	100 (19.30)
Grandfather alone.....	100 (19.30)
Grandmother and grandfather	175 (33.77)

Given in form of relief through local civil courts. Officially renewed automatically unless court decides otherwise.

J. O., ch. dép. doc. sess. ord., 1916, vol. 3, p. 1970.

GOVERNMENT RELIEF.

In addition to the regular pensions and military allowances, certain financial assistance is given by the ministry of war as relief (secours) of various sorts.

IMMEDIATE RELIEF.

This relief is given in case of the soldier's death to the widow or orphans, or (failing these) to ascendants, or in rare cases to younger dependent brothers and sisters of an unmarried soldier. The amount varying from 150 francs (\$28.95) for the family of a private to 800 francs (\$154.40) for that of a general is given only once.

PERMANENT RELIEF.

Permanent relief is open to widows and orphans who have allowed their pension claim to lapse; to old soldiers who have lost their sight or who have suffered amputation while in service but from causes outside their service; to widows and orphans of officers who have died in enjoyment of the disability allowance which is granted in the absence of a pension (pension de réforme). The relief is given if the applicants are found upon investigation to be worthy and in need, and it is withdrawn only if they prove unworthy or if their financial condition improves. The amount is variable within each grade according to the resources of each case.

SPECIAL OR OCCASIONAL RELIEF (SECOURS ÉVENTUEL).

In cases worthy of attention, special relief may be given to soldiers having been through an active campaign or to their widows or orphans (even if death takes place after active service has ceased) or to their ascendants if they do not leave either widow or orphans. The grant is purely gratuitous and is renewable only upon renewed request and within the limits of the special budget appropriation. The

amount varies in each grade according to the length of service, the age, and the resources of the applicant.

OTHER RELIEF.

Finally there is relief "in anticipation of the pension" for the benefit of those awaiting their rights, and extreme emergency relief given to the very needy. This is given in amounts varying from 5 to 10 francs (97 cents to \$1.93).

The part played by the war relief (*secours*) as an adjunct to the pension provision is indicated by the recent disbursements. The official figures from the beginning of the war to October 1, 1916, show appropriations amounting to 81,540,519 francs¹ (\$15,737,320) for assistance, over 72,000,000 francs (\$13,896,000) of which were to be used for immediate relief.

Besides the relief extended directly from the War Department, financial assistance is also available to soldiers' families from the "Fund of National Subscription" (*Offrandes Nationales*). This is a semi-independent institution but recognized as a public utility and organized under ministerial supervision. Relief from this source can be received in addition to a pension. Assistance is at present being given to the following classes: (1) Soldiers wounded and rendered infirm in service; (2) widows of soldiers who were married before leaving active service; (3) soldiers' orphans born during the time of the father's active service; (4) ascendants of soldiers killed by the enemy or dying from illness contracted in service and leaving neither widow nor orphans.

GUIDE BARÈME.

[*Pour Obtenir une Pension Militaire.* Léon Parisot, Editions et Librairies, Paris, 1915, p. 26.]

CLASSIFICATION TABLE OF WOUNDS AND INFIRMITIES GIVING RIGHT TO A PENSION ACCORDING TO THE CATEGORIES FIXED BY THE LAWS OF APRIL 11 AND 18, 1831.

CLASS I.

Total blindness.

CLASS II.

Amputation of two limbs.

CLASS III.

Amputation of one limb (hand or foot).

CLASS IV.

Total loss of use of two limbs, or equivalent infirmities:

1. Complete hemiplegia or paraplegia of traumatic origin or caused by fatigues of service.
2. Serious disturbance of cerebral functions, loss of memory, of speech, imbecility, dementia, mental aberration, etc., resulting from wounds of the head, congestion, insolation, meningo-encephalitis, fatigues of service, etc.

¹ J. O., ch. dép. doc. sess. ord., 1916, v. 3, Annexe 2383, p. 1988.

3. General paralysis at the stage of incontinence of urine or feces.
4. Extensive mutilations of the face, including at the same time either the eye, the orbit of the eye, and the upper jawbone on one side; the two upper jawbones and the nose or an upper and a lower jawbone; the whole lower jaw and the tongue.
5. Fistula of the stomach, artificial anus, opening from small intestine (resulting from a wound).
6. Loss of the penis and testicles by a wound.
7. Simultaneous ankylosis of several joints of the upper and lower limbs, resulting from rheumatic affections contracted in service.

CLASS V.

8. Tarso-metatarsal, mediotarsal, sub-astragaloid amputation, when walking is possible on the stump.
9. Incomplete hemiplegia and paraplegia, permitting some useful movements, caused by traumatism or fatigues of service.
10. General progressive paralysis at the static stage, caused by fatigues of service.
11. Progressive locomotor ataxia, caused by fatigues of service.
12. Epilepsy, epileptiform attacks, chorea, functional spasms, paralysis agitans, spasmodic or other neuroses (motor or sensory), resulting from trauma or occurrence of service.
13. Paralysis of an important organ (muscles of the eye, of the tongue, of the pharynx, of the larynx, of the bladder, etc.), caused by traumatism or fatigues of service.
14. Progressive muscular atrophy, affecting a whole limb or two limbs incompletely or extending to the muscles of the trunk, and caused by fatigues of service.
15. An ulcer or ulcerated scar resulting from a great loss of tissue.
16. Elephantiasis, leprosy, or ulcers, deep, extensive, or numerous, due to a hot climate.
17. A deep and extensive scar of the skull with loss of tissue of the pericranium, and of the whole thickness of the bone, caused by traumatism or an operation.
18. Persistent deviation of the head or trunk producing marked limitation of movement and resulting from traumatism or an affection contracted during service (lesion of the spine or muscles).
19. Complete deafness of both ears, resulting from a wound or from a disease contracted during service.
20. The destruction or atrophy of an eye or complete loss of sight, or a very apparent external deformity of the eyeball (staphyloma, leucoma, hernia of the iris, etc.).
21. Loss of sight of one eye, diminution of the sight of the other, or weakening of visual acuity of less than $\frac{1}{4}$ in both eyes, resulting from disease contracted in service (granular ophthalmia, irido-choroiditis, papillary atrophy, etc.).
22. Deformity of the face, of the eyelids, and of the lachrymal ducts; loss of the nose, etc., causing an important limitation of function and resulting from traumatism.
23. Deformity of either jaw with extensive loss of tissue, deviation of the rows of teeth, or loss of the greater part of the teeth, or destruction of the hard palate or the soft palate; or ankylosis of the temporo-mandibular articulation, caused by a wound.
24. A permanent fistula or constriction of the respiratory passages from traumatic causes (fracture of the larynx, injury to the trachea, etc.), laryngo-tracheotomy performed for a disease contracted in service.
25. Persistent fistula or constriction of the pharynx and the oesophagus as a result of wounds.
26. Persistent fistula or considerable contraction of the thorax either from traumatic causes or from pleurisy or from the operation for empyema, if the disease was occasioned by the fatigues or dangers of service, independently of any constitutional predisposition.

27. Irreducible hernia of the lung from traumatic causes.
28. Chronic affection of the heart and large blood vessels from traumatic causes or from a rheumatic or infectious disease contracted in service.
29. Chronic bronchitis complicated with emphysema and with a heart affection or attacks of asthma caused by fatigues of service.
30. Tuberculosis of the respiratory organs (larynx, lungs, pleural cavities) or of the digestive organs (intestine, peritoneum, other viscera) caused by fatigues of service and independent of any appreciable constitutional predisposition.
31. A chronic affection of the stomach, following upon an endemic disease of hot climates, or caused by a long stay in these climates or by the fatigues of service.
32. Dysentery or chronic diarrhea, producing a general undermining of the constitution, contracted in a hot climate or in field service.
33. Chronic enlargement or abscess of the liver due to the influence of the marshes or to a long stay in a hot climate.
34. Cachexia due to life in the marshes with deterioration of the constitution and enlargement of the viscera, or nephritis, or dropsy.
35. An extensive ventral hernia or eventration.
36. Faecal fistula from traumatic causes.
37. Constriction or prolapsus of the rectum; incurable fistula of the anus, following wounds or diarrhea or dysentery in hot climates.
38. Nephritis or purulent cystitis, stone in the bladder or kidney; fistula of the bladder or urethra, incurable constriction or irremediable loss of tissue of the urethra, causing incontinence or retention of the urine, due to traumatic causes.
39. Loss of the penis, or loss or destruction of both testicles (from traumatic causes).
40. Abscess from symptomatic congestion of an incurable lesion of the spine or pelvis from traumatic causes or fatigues of service.
41. Complete impotence of a limb resulting from paralysis of traumatic origin, rheumatic or other; muscular atrophy of rheumatic or other origin, chronic suppurative arthritis of a main joint, of rheumatic or other origin; deformity or ankylosis of the joints following chronic rheumatism or retraction of the muscles and tendons or from cicatricial adhesions; a considerable deviation or shortening as a result of a fracture badly healed or an operative resection; pseudoarthrosis following a fracture or a resection; chronic generalized periosteo-myelitis, from traumatic causes; a dislocation of a main articulation without reduction; diffuse aneurism or an extensive arteriovenous aneurism caused by a wound.
42. Complete ankylosis of the shoulder; of the elbow in extension; of the hip, flexed or with a deviation of the leg; of the knee flexed; of the foot badly twisted or dislocated (resulting from resection, or from rheumatic or other affection resulting from fatigues of service).
43. Permanent flexion or extension of all the fingers of the hand from traumatic causes or an affection contracted in service.
44. Simultaneous loss of thumb and index finger with or without the loss of the corresponding metacarpals.
45. Loss of three fingers with their metacarpals; of the four last fingers of the hand; of two fingers with a limitation of movement or a deviation of the remaining fingers and atrophy of the hand.
46. Loss of the first two metatarsals or of the last three metatarsals.

CLASS VI.

47. Extensive, painful, contracted, ulcerated or adhesive scars of deeper tissues or organs, or those accompanied with muscular hernia causing a serious limitation of function in whatever part of the body.
48. Persistent fistula caused by necrotic or carious periostitis of traumatic origin.

49. Tumors of various sorts which cause serious functional disturbances and are manifestly the result of trauma suffered in service.
50. Pronounced diminution of hearing in both ears, or complete deafness in one ear with facial paralysis or destruction of the external ear resulting from a wound or a disease contracted in service.
51. (Unnecessary. It concerns loss of sight in one eye which, by decision of Mar. 1, 1907, has been listed in Class V, No. 21.)
52. Inguinal or crural hernia (one or both sides) when it is irreducible or presents unusual difficulties in its mastery.
53. Extensive and permanent hemorrhoids causing weakening of the constitution and developed during a stay in a hot climate.
54. Hydrocele or hematocele grown incurable by the thickening of the tunica vaginalis or by any other complication, originating in a traumatism attributable to the service.
55. Marked or serious varices, complicated with permanent edema, with pronounced trophic disturbance or with ulcers; obstructed veins.
56. Incomplete paralysis or atrophy of one limb from trauma, rheumatism (sciatic or other), attributable to fatigues of service.
57. Partial deviation and partial retraction of a limb by muscular contraction or paralysis, adhesive scars, or cicatricial bands.
58. Irregular misshapen calluses with a superposition of one bone on another, or a malposition, osteitis or cicatricial adhesions resulting from a fracture of the long bones of the limbs, the bones of the pelvis, or the shoulder blade, and causing a considerable limitation of function.
59. Nonsuppurative chronic arthritis of a main articulation (of traumatic, rheumatic, or other origin) attributable to fatigues or dangers of service.
60. Complete ankylosis of the elbow flexed; of the wrist with limitation of the movements of pronation and supination and of the fingers; of the hip with the leg straight; of the knee in extension; of the foot deformed, enlarged, or atrophied, and limited in the free motion of the toes (as a result of traumatism, of resection, or of an affection—rheumatic or other—caused by the fatigues of service.
61. Unreduced dislocation of the wrist or of the bones of the instep, when they produce a serious limitation of function.
62. Unreduced dislocation of the thumb or of the great toe, accompanied by cicatricial adhesions and by stiffness of the other fingers and toes.
63. Permanent flexion or extension of three fingers, a limitation of movement in the other fingers, and atrophy of the hand and forearm.
64. Loss of the thumb with or without loss of its metacarpal.
65. Loss of two fingers, with loss at the same time of the corresponding metacarpals; of two fingers, with stiffness of the remaining fingers. All other analogous mutilation of the hand involving a serious limitation of function.
66. Loss of all the toes of one foot; of the first metatarsal and the great toe; of two other metatarsals.

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ABBREVIATIONS.

J. O. Journal Officiel (daily edition).

J. O. ch. dép. doc. sess. ord. Journal Officiel, Chambre des Députés, Documents; session ordinaire.

J. O. sén. déb. Journal Officiel, Sénat, Débats.

Bull. du min. du travail. Bulletin du Ministère du Travail et de la Prévoyance Sociale.

Bull. off. min. de la guerre. Bulletin officiel du Ministère de la Guerre.

Dalloz. Dalloz. Guerre de 1914, Documents Officiels, Textes Législatifs et Règlementaires.

GERMANY.¹

PROVISIONS FOR DEPENDENTS OF MEN IN ACTIVE SERVICE.

SEPARATION ALLOWANCES.²

Separation allowances are paid to members of soldiers' families³ on a scale varying according to the season. Minimum allowances paid to the wife are 15 marks (\$3.57) monthly from May to October, inclusive, and to other dependents 7.50 marks (\$1.79) monthly. From November to April, inclusive, the minimum allowances are 20 marks (\$4.76) to the wife and 10 marks (\$2.38) to other dependents.

Minimum allowances are paid from the imperial treasury. All sums in addition to the minimum allowances prescribed are granted from the local treasuries.

¹ The German material was prepared by Miss Marguerite D. Darkow.

² Latest status, January, 1917, according to laws of Jan. 21, 1916, and Dec. 3, 1916. (Reichsgesetzblatt, 1916, pp. 55, 1323.)

³ Separation allowances are granted in case of need to families of members of the reserves, Landwehr, complementary reserves (Ersatzreserve), Seewehr, Landsturm, of men on leave of absence at the disposition of the marine division of troops, of war volunteers above the age limit for compulsory service, and under personnel of the voluntary medical corps; to families of men legally obliged to serve in active service; of men who on account of the war have been unable to return home, provided it seems plausible that they have been prevented by imprisonment, civil or military, in enemy countries; of men who at the age for compulsory military service are detained in neutral countries and on account of enemy measures are unable to return home; of men who at the age for compulsory military service have been carried off by the enemy; of members of active troops who have finished their time of active service in peace time and have been placed in the reserves; of men (17 to 20 years of age) not yet obliged to serve who have volunteered or been drafted; of war volunteers who are in no way bound to the army; of soldiers discharged as being permanently unserviceable; of women in the under personnel of the voluntary medical corps. This includes practically all the fighting men of Germany, excepting levied recruits on leave of absence, men who are entered as volunteers under certain conditions, and war volunteers not yet 17 years old.

The persons entitled to allowances are the following:

Wife.

Separated wife..... If she is innocent and husband is obliged to pay maintenance. Law does not state whether amount of allowance for full wife or for other dependent is granted; probably the latter.

Legitimate child..... Under 15 years of age.

Illegitimate child..... If the father's obligation to support the child has been established.

Illegitimate child of wife brought into marriage, although her husband is not the father.

Child over 15 years of age.

Orphan grandchild under 15 years of age.

Orphan grandchild over 15 years of age.

Stepchild.

Foster child adopted before the war.

Relative of husband in ascending line.

Relative of wife in ascending line.

Sister or brother.

Step-parent.

Step brother or sister.

Foster parent adopted before the war.

If formerly supported by the soldier or if the need of maintenance first appeared after he entered the service.

The allowance to ascendants or collaterals is the same no matter how many sons or brothers are in the field.

No separation allowance is granted except in case of need. The law of January 21, 1916, states that maintenance is to be paid if the total income of the soldier and his family is placed by the last assessment of taxes at 1,500 marks (\$357.30) or less, or 1,200 marks (\$285.84) or less, or 1,000 marks (\$238.20) or less, according to the size of the community in which the family lives.

If the actual income of a person applying for maintenance is essentially higher or lower than that of the class in which the family is rated for the purpose of taxation, or if no such rating has been made, the distributive agencies (Lieferungsverbände) fix the figure at which the family income shall be rated for determining the applicant's eligibility. By determination of the central authorities (Landeszentralbehörde) this is true also for those federated States in which income tax is not collected. As a rule no claim upon maintenance exists if the income of the soldier's family has not decreased or if other facts justify the assumption that maintenance is unnecessary. A little property or capital should not, however, interfere with the

grant. "It is not in accordance with the spirit of the law that the family should first use up its own small property."

The sums of money specified in the schedule *must* be paid to the beneficiaries by the distributive agencies, no matter what private allowances (whether of money, food, or what not) or State allowances (e. g., to relatives or State employees) are given. Wherever these sums of money are inadequate to enable the beneficiaries to maintain a modest mode of living or to provide the necessities of life, the distributive agencies are supposed to give additional sums of money or supplies. Each agency has a commission which decides in each case on the need of the claimants and the amount of relief to be given. It may demand data from the local authorities on the circumstances of individual families.

Citizenship in Germany is not essential to the payment of the separation allowance. Thus the needy illegitimate child of a man fighting under the German colors receives the allowance even if it has Austrian citizenship by its mother. Thus, also the mother, supported by a German soldier, receives the allowance, even if she has become an Austrian.

Application is made by the family to the community magistrate or to the subcommittee of the soldier's usual residence. Here the matters of right to allowance, relationship, need, previous support, etc., are examined. The application is then laid before the suitable committee of the distributive agency, which makes the final decision. All expedition is used and questions not immediately pertinent are abandoned.¹

Allowances are paid twice a month in advance, from the time of mobilization to the time of the soldier's return; payment is not interrupted for the time spent by the soldier at home on sick leave.

If the soldier becomes a deserter or is sentenced to a six-months' prison term or to a severer punishment, the payment of allowances is suspended until he reenters service.

If the soldier dies in service or is reported missing, the allowance is continued to the family until the army unit to which he belonged is either brought to its peace footing or is dissolved, unless his survivors are entitled to a dependents' pension. In such case the separation allowances are continued for three months after the time when the survivors' pension becomes due.² The allowances paid during these three months are considered advance payments on account of the survivors' pension, and are subtracted therefrom.

According to the *Soziale Praxis* (Jan. 6, 1916, p. 323) the wages of soldiers³ reported captured or missing are paid to the soldier's family

¹ Laws of Feb. 28, 1888; Aug. 4, 1914; Jan. 21, 1916; Dec. 3, 1916 (R. G. Bl. 1888, p. 59; 1914, p. 332; 1916, pp. 35, 1323).

² Law of Sept. 30, 1915, R. G. Bl. 1915, p. 629; law of May 17, 1907, R. G. Bl. 1907, p. 214.

³ According to Hinrod, *Was muss jeder Kriegsteilnehmer von der Kriegsversorgung wissen?* (Muenchen, 1915) the war pay of the private soldier amounts to 15.90 marks (\$3.78) a month.

provided the family is receiving the maintenance allowance from the Government. Nephews or nieces may also receive this money if the soldier captured or missing was their chief or whole support.

ASSIGNED PAY.¹

Men in army service may during the war assign part of their pay to their families, either in regular monthly or in lump-sum payments. Pay may be assigned, however, only when it is necessary to help support the family.

The maximum assigned pay for commissioned officers is seven-tenths of their war pay and for noncommissioned officers and privates seven-tenths of their wages according to rank. The minimum pay of a private soldier is 15.90 marks (\$3.78) per month. Unmarried men may assign their pay only if members of their families at home are dependent on them. The sole beneficiaries are wife and children and such members of the family as were wholly or chiefly supported by the soldier.

Monthly payments are made either by local banks or by postal money order, and continue when the soldier is captured by the enemy, missing, or sick in a hospital.

INDEMNITY TO FAMILIES FOR SONS IN THE ARMY, NAVY, OR COLONIAL FORCES.²

By a decree of March 26, 1914 (R. G. Bl., 1914, p. 57), an indemnity was granted to families whose sons (legitimate or illegitimate before the law), by serving their two or three years' time of active service in the army, navy, or colonial forces, had served six years altogether as noncommissioned officers or privates. Thus, to take the simplest case, two sons might have served three years each. For every further year of service of any of its sons in the same rank of service (Dienstgrad) the family receives on application an annual indemnity of 240 marks (\$57.17). In the case of service in the colonial forces, the indemnity is paid even if the beneficiaries are not living in the colonies.

The beneficiaries are (a) parents; if these are not living, (b) grandparents, but only if they are unable to work and were permanently supported by the soldier up to the time of his enlistment. In the case of grandparents, the years of service must be those of sons of the same son of the grandparent. If there are step-parents, their claim precedes that of grandparents, but depends, as with grandparents, upon their having been permanently supported by the soldier up to the time of his enlistment. In the case of step-parents, the times of

¹ The treatment of this subject is taken from M. Adam, *Das Militärversorgungsrecht*, etc., Berlin, Kameradschaft, 1916, pp. 322-328.

² Source: M. Adam, *Das Militärversorgungsrecht*, etc., Berlin, Kameradschaft, 1916, pp. 362-367.

service of full and half brothers are counted together. The time of service is counted from the day of enlistment to the day of dismissal, but a leave of absence of more than three months is excluded.

Application must be made for the indemnity to the magistrate of the community in which the beneficiary has his usual residence. From him it passes to a lower administrative authority, who examines into the time of service of the sons and the troops to which they belonged. Finally, the central authorities of the State (Landeszentralbehörde) receive the application, decide whether or not to grant it, and give notice for payment to an appropriate bank. The payments, based on a monthly sum of 20 marks (\$4.76) are made twice a year—on April 1 and October 1.

The claim upon this indemnity ceases six months after the son is dismissed from the service or dies. Payment is discontinued (a) if and while the son, before the end of his legally required time of active service, is on leave of absence; (b) if he is absent from duty for longer than four weeks; (c) if he is punished by imprisonment of more than six weeks. In the second case, if no guilt on his part is proved, the omitted payments are refunded. In either the second or the third case, if he is absent from service for more than 10 days in any one month, payment for that month is cut off.

MATERNITY BENEFITS.¹

The maternity benefits granted under the imperial insurance code of 1911 have been extended by the laws of December 3, 1914, January 28, 1915, and April 23, 1915,² to include:

1. Wives of men who are performing military, medical, or similar service in the war for the Empire, or who are prevented therefrom or from again pursuing a wage-earning occupation by death, injury, sickness, or capture, provided they were insured against sickness in accordance with the imperial insurance code or in a miners' sickness insurance fund at least 26 weeks in the 12 months preceding their entrance into the service, or at least 6 weeks immediately before the same time.

2. Wives of men who belong, or did belong until the outbreak of the war or after, to the paid crews of German ships and who are not insured against sickness according to section 165, paragraph 1, No. 7, of the imperial insurance code; who receive not more than 2,500 marks (\$595.50) per year compensation; and who are performing military, medical, or similar service in the war for the Empire or are prevented therefrom or from again pursuing a wage-earning occupation by death, injury, sickness, or capture.

¹ A very condensed statement based on M. Adam, *Das Militärversorgungsrecht*, etc., Berlin, Kameradschaft, 1916, pp. 308-309.

² R. G. Bl., 1914, p. 492; 1915, pp. 49, 257.

3. Wives of men who are performing military, medical, or similar service in the war for the Empire, or who are prevented therefrom or from again pursuing a wage-earning occupation by death, injury, sickness, or capture, provided the wives are in needy circumstances (*minder bemittelt*), that is, (a) if they receive separation allowance; or (b) if the total income of wife and husband in the fiscal year before his entrance into the service did not exceed 2,500 marks (\$595.50); or (c) if the income remaining to the wife after the husband has entered the service does not exceed 1,500 marks (\$357.30) or, if she has already x living children under 15 years, does not exceed 1,500 marks plus $250x$ marks ($\$357.30 + \$59.55x$). Mothers of illegitimate children receive the maternity benefits, provided the child receives separation allowance.

4. Pregnant women who belong, or did belong until the outbreak of the war or after, to the paid crew of a German ship and who are not insured against sickness according to section 165, paragraph 1, No. 7, of the imperial insurance code also receive the maternity benefits, if the women have no claim upon this grant through their husbands.

The maternity benefits consist of:

(a) A single contribution to the expenses of confinement, 25 marks (\$5.95).

(b) A lying-in grant of 1 mark (24 cents) per day, including Sundays and holidays, for 8 weeks, 6 of which must be after confinement.

(c) Contribution up to 10 marks (\$2.38) for midwife and doctor if necessary, prior to time of confinement.

(d) Nursing premiums to mothers while they nurse their babies, one-half mark (12 cents) per day, including Sundays and holidays, until the twelfth week after confinement.

The benefits are distributed by the sickness insurance fund to which the husband last belonged, but if the woman herself is insured in another insurance fund of this type, the latter pays the benefits. The woman applies to the distributive agency (*Lieferungsverband*), or to a sickness insurance fund if she belongs to one. Maternity benefits and separation allowances are paid in the same place. If no separation allowance is drawn, the maternity benefit is paid at the end of every week.

The constitution of the individual sickness insurance fund may decide whether free treatment by midwife and doctor, as well as medicine, are to be given instead of the first and third benefits mentioned above. If women are entitled to the lying-in benefit by section 195 of the imperial insurance code of 1911, but not through their husbands, the sickness insurance fund must pay benefits *a*, *b*, and *c* out of its own means. Otherwise the grants are refunded by the Government.

PENSIONS.¹

DISABILITY PENSIONS.

(1) *Disability pensions* are granted according to rank, salary, length of service, and extent of disability. Officers' disability pensions increase after the tenth year of service, and in certain cases may be supplemented by additional allowances (accessory pension in case of need and during indigence) until the pension reaches a certain limiting sum. For noncommissioned officers and privates, the disability pension depends upon the extent of disability, and is increased for those who according to budget received a pensionable bonus, such as good conduct pay. (A "pensionable" sum of money is a sum which is used as the basis or part basis of the sum on which the pension is calculated.) The minimum pension for total disability for a private is 540 marks (\$128.63).

(2) A *mutilation bonus* is provided for all officers and soldiers for the loss of (or serious disturbance in the functioning of) a foot, a leg, a hand, an arm, speech, hearing (both ears), one eye if the other is impaired, or such injury to health that nursing is needed. This bonus is doubled in case of loss of sight (both eyes), and may be increased to the double amount if the beneficiary is permanently confined to bed or suffers from some mental disorder. The bonus is between two and three times as large for officers as it is for noncommissioned officers and privates. Officers: 900 marks (\$214.38), 1,800 marks (\$428.76); noncommissioned officers and privates: 324 marks (\$77.18), 648 marks (\$154.36).

(3) A *war bonus*² is provided for persons entitled to a pension on account of an injury received in war. This is from four to seven times as high for an officer (720 marks or 1,200 marks—\$171.50 or \$285.84) as it is for a noncommissioned officer or a private (180 marks—\$42.88).

(4) An *old-age bonus* is provided for recipients of the war or aviation bonus who are over 55 years of age (or under if they are completely unfit for work), provided their total income is under 3,000 marks (\$714.60) a year for an officer, and 600 marks (\$142.92) a year for

¹ The German pension system depends upon three basic laws: Law of May 31, 1906, on the pensions of officers (including medical officers) of the army, navy, and colonial forces (R. G. Bl. 1906, p. 565); law of May 31, 1906, on the pensions of persons of lower rank in the army, navy, and colonial forces (R. G. Bl. 1906, p. 343); law of May 17, 1907, on the pensions of dependents of members of the army, navy, and colonial forces (R. G. Bl. 1907, p. 214). In addition there are various amendments which are (except where otherwise specified) embodied in the schedules: (a) Law of June 29, 1912, providing pensions for aeronauts and their dependents (R. G. Bl. 1912, p. 415); (b) law of July 3, 1913, increasing a few of the figures in the second pension law of May 31, 1906 (R. G. Bl. 1913, p. 496); (c) law of Aug. 4, 1914, providing war pensions for certain officials of the civil administration and their dependents (R. G. Bl. 1914, p. 335); (d) law of June 9, 1916, changing a few regulations for the suspension of pensions as given in the first pension law of May 31, 1906 (R. G. Bl. 1916, p. 492); (e) law of July 11, 1916, concerning the indemnification of beneficiaries by capital in place of the war pension (R. G. Bl. 1916, p. 680).

² Of the war bonus, the aviation bonus, the Tropics bonus, and the accessory pension for climate and shipwork, no two may be granted simultaneously.

a noncommissioned officer or a private. The bonus raises their total income to these specified sums.

(5) *An aviation bonus*¹ is provided for persons entitled to a pension on account of an injury received in aviation.

(6) *An accessory pension*¹ for foreign climate and shipwreck is granted to members of the Navy and colonial forces. The amounts of (5) and (6) are the same as those granted for war bonus.

(7) *A Tropics bonus*¹ is granted to members of the colonial forces who have become entitled to a pension on account of the extraordinary influences of the climate during a sojourn in the colonies, or as a result of the peculiar perils of the colonial service. This bonus is from two to four times as high for officers as for noncommissioned officers and privates, and increases with increasing time of service in the colonies.

(8) *A certificate showing claim to a post in the civil service* is granted on retirement to disabled noncommissioned officers and privates, in addition to the disability pension, but only if they appear worthy and serviceable to the superior officials. Otherwise, in certain cases, a yearly indemnity is provided for this certificate. Or the beneficiary may choose to exchange this certificate for the yearly indemnity or for a single sum of money 3,000 marks (\$714.60) if useful expenditure is guaranteed.

(9) *A service pension* of lifelong duration, increasing with years of service, is provided for noncommissioned officers and privates who have served over 18 years and are not entitled to a disability pension.

Salary on basis of which pension is calculated includes the following:

For the Army.

(a) Officers: 1. Salary according to pay roll (compare Schedule 16). For lieutenants the salary of infantry lieutenants only, with the exception of lieutenants of artillery, depot pyrotechnics, fortifications, train depot, and manager of the corps of cadet with the rank of officer. 2. Lodging allowance; or, if lodging is provided by the service, its equivalent in money as stated in the pay roll. 3. Contributions of 500 marks (\$119.10) for officers, from commander of brigade (inclusive) down, for servants' wages. 4. Supplementary allowances, according to pay roll for officers from commander of brigade (inclusive) up. If these amount to more than 900 marks (\$214.38), only two-thirds of the amount are included. 5. For lieutenants (second and first): Right to eat at officers' mess, valued at 108 marks (\$25.73); right to hospital care, 100 marks (\$23.82). In time of war the pensionable income is that of the peace rank which corresponds to the

¹ Of the war bonus, the aviation bonus, the Tropics bonus, and the accessory pension for climate and shipwreck, no two may be granted simultaneously.

war rank last held by the officer. The same is true after the war. In case the disability is due to war, and a higher pensionable income had not been attained in time of peace, the former is used as the basis of pension calculation.

(b) Officers of the Army reserves: Pensionable income of infantry of the same rank.

(c) Officials in Army: Lowest income of corresponding peace time rank, or income of rank actually occupied or promoted to in peace time, if the income of this rank is higher. This holds also after the war, if the disability is due to the war.

(d) Officials of the Army reserves: Income of corresponding peace time rank; where several salaries go with a rank, the highest is chosen.

(e) Officials of the civil administration, and the churches in the Army: Income of the civil position last held in peace time.

For the Navy.

(a) Officers: 1. Salary according to pay roll. 2. For officers from vice admiral (inclusive) down: The lodging allowance, or, if lodging is supplied, its equivalent in money according to pay roll. 3. For officers from rear admiral (inclusive) down; allowance for servant 500 marks (\$119.10). 4. For officers from rear admiral (inclusive) up: Supplementary allowances. If these are over 900 marks (\$214.38), only two-thirds of the amount is included. 5. Additions to salary (Besoldungszuschuss): If over 900 marks (\$214.38), only two-thirds counts. 6. For first and second lieutenants: 108 marks (\$25.73) for right to eat at officers' mess; 100 marks (\$23.82) for right to hospital care. 7. For medical officers the additions for length of service and voyage bonuses are included.

(b) Deck officers (noncommissioned officers): 1. Salary according to pay roll. 2. Bonus for sea voyages and specialists' bonus, drawn on leaving service. 3. Right to accommodation in hospital, 100 marks (\$23.82).

(c) For all other officers and officials of the Navy and Naval reserves, same as for corresponding officers and officials in the Army or Army reserves.

For the Colonial Forces.

The income on the basis of which pensions are calculated is the pensionable income of the corresponding rank in the Army or Navy. In the case of officials, if there is no corresponding rank in the Army or Navy, the imperial chancellor fixes the amount of the pensionable income and pension.

Minimum disability pension for a private.—If the working ability of a private who is under 55 years of age is decreased 10 per cent by an injury sustained in the service (but not in time of war or as a result

of aviation), he receives on retirement a yearly pension of 54 marks (\$12.86) as long as his fitness for work remains decreased 10 per cent. Since he has not been mutilated, he receives no mutilation bonus. If he appears unworthy or unserviceable in the eyes of the superior officials, he receives no certificate showing claim to a post in the civil service and no indemnity for the loss of this certificate.

Maximum disability pension for a private.—(a) If the private's ability to work is decreased 100 per cent on account of an injury sustained in the service, he receives on retirement a yearly pension equal to 540 marks (\$128.63). If the injury is a major mutilation, such as the loss of sight (both eyes), the private receives 648 marks (\$154.35) a year mutilation bonus in addition; and if the injury was received in war or aviation, he receives the war or aviation bonus of 180 marks (\$42.88). He will probably not be granted the certificate showing claim to a post in the civil service, because he will hardly appear competent to the superior officials. In the case of a private during his first enlistment, the law provides no indemnity for the loss of this certificate. Total pension, 1,368 marks (\$325.86) per year.

(b) If the private has reenlisted and receives an injury in the service which decreases his working ability 100 per cent he receives on retirement a yearly pension of 540 marks (\$128.63). If the injury is a major mutilation—loss of sight (both eyes), the private receives 648 marks (\$154.35) mutilation bonus. Moreover, if the injury was received in war or aviation he is entitled to the war or aviation bonus of 180 marks (\$42.88) yearly. He is not granted the certificate showing a claim to a post in the civil service, because of incompetence; but because he has served 12 years he receives instead an indemnity of 240 marks (\$57.17) per year, which is granted because he is a reenlisted private. Total pension, 1,608 marks (\$383.03) per year.

The mutilation bonus in cases (a) and (b) may be larger. Thus a man may receive for the loss of 2 arms and 2 legs (or 2 hands and 2 feet) 4 times 324 marks (\$77.18), or 1,296 marks (\$308.71); for the loss of speech, 324 marks (\$77.18); for the loss of hearing (both ears), 324 marks (\$77.18); in all, 1,944 marks (\$463.06). This will make the total pension (a) equal 3,312 marks (\$788.92); (b), 3,552 marks (\$846.09).

SCHEDULE 15.—Germany. Pensions for disability or service.

A. COMMISSIONED OFFICERS OF THE ARMY, NAVY, AND COLONIAL FORCES.

Key: S equals pensionable salary (see pp. 83, 85). I equals income after leaving the service. M. equals marks, German monetary unit, equivalent to 90.2382.

[Source: Reichsgesetzblatt, 1906, p. 365; 1912, p. 415; 1914, p. 335.]

[Amounts followed by M. are in marks; other amounts are in dollars.]

Pensions, annual amounts, granted as—											
Beneficiaries having salary equivalent to that of—	Disability pension. ³			Accessory pension in case of need. ^{6,7}	Mutilation bonus. ⁸		Additional bonus (alternatives).			Old age bonus (discretionary). ^{7,12}	Allowance in case of need to unpensioned officers. ⁵
	After 10 years' service or less. ⁴	Increase for each year in excess of 10. ⁵	Increase for each year in excess of 30. ³		Minor.	Major.	War or aviation. ⁹	Climate or shipwreck (navy only). ¹⁰	Tropics (colonial forces only). ¹¹		
Regimental commander or higher.	33½% of S	13% of S	4% of S	.....	900 M. (214.38)	1,800 M. (428.76)	720 M. (171.50)	720 M. (171.50)	Min., 720 M. (171.50)	3,000 M.—I (714.60—I)	Max., 33½% of S
Officers lower than regimental commander and higher than captain.	33½% of S	13% of S	13% of S	.....	900 M. (214.38)	1,800 M. (428.76)	720 M. (171.50)	720 M. (171.50)	Min., 720 M. (171.50)	3,000 M.—I (711.60—I)	Max., 33½% of S
Captain.....	33½% of S	13% of S	13% of S	Max., 2,400 M.—I (571.68—I)	900 M. (214.38)	1,800 M. (428.76)	1,200 M. (285.84)	1,200 M. (285.84)	Min., 1,200 M. (285.84)	3,000 M.—I (714.60—I)	Max., 33½% of S
First lieutenant. ¹⁴	33½% of S	13% of S	13% of S	Max., 1,800 M.—I (428.76—I)	900 M. (214.38)	1,800 M. (428.76)	1,200 M. (285.84)	1,200 M. (285.84)	Min., 1,200 M. (285.84)	3,000 M.—I (714.60—I)	Max., 33½% of S
Second lieutenant.	33½% of S	13% of S	13% of S	Max., 1,200 M.—I (285.84—I)	900 M. (214.38)	1,800 M. (428.76)	1,200 M. (285.84)	1,200 M. (285.84)	Min., 1,200 M. (285.84)	3,000 M.—I (714.60—I)	Max., 33½% of S

(For footnotes see pages 81-82.)

SCHEDULE 15.—Germany. Pensions for disability or service—Continued.

C. NAVY.¹⁴ NONCOMMISSIONED OFFICERS AND ENLISTED MEN.

Key: *CB* equals pensionable active service bonus for good conduct. *SB* equals pensionable active service bonus for specialized skill. *TR* equals pensionable active service bonus for time of service. *VB* equals pensionable active service bonus for sea voyages. *I* equals income from all sources after leaving the service. *M* equals marks, the German monetary unit, equivalent to 90.2382. *u* equals years served in excess of 18 years.

[Source: Reichsgesetzblatt 1906, p. 593; 1912, p. 415; 1913, p. 496.]

Beneficiaries.	Pension for injury sustained in the service.													
	Disability pension. ¹⁵	Accessory pensions based on active service bonuses.					Mutilation bonus. ⁸		Additional bonus (alternatives).		Old-age bonus (discretionary). ^{7, 12}	Money granted in place of civil-service certificate on retirement. ¹⁶	Service pension for life independent of disability. ¹⁷	Extra allowance (temporary). ¹⁸
		Good conduct <i>CB</i> .	Increase for time of service <i>TB</i> . ¹⁹	Increase for sea voyages <i>VB</i> . ¹⁹	Specialized skill <i>SB</i> .	Minor. Major.		War or aviation. ⁹	Climate or shipwreck. ¹⁰	Tropics (colonial forces only). ¹¹				
Privates in navy and personnel of voluntary medical corps (unless of higher rank) and cabin boys. ²⁰	540 M. (128.63) or less.	75% of <i>CB</i>					324 M. (77.18)	648 M. (154.35)	180 M. (42.88)	Minimum, 300 M. (71.46)	600 M.— <i>I</i> (142.92— <i>I</i>)			Maximum, 270 M. (64.31).
Non commissioned officers of navy (other than deck officers): ¹³														
Corporal.....	600 M. (142.92) or less.	75% of <i>CB</i>					324 M. (77.18)	648 M. (154.35)	180 M. (42.88)	Minimum, 300 M. (71.46)	600 M.— <i>I</i> (142.92— <i>I</i>)			300 M. (71.46)
Sergeant.....	720 M. (171.50) or less.	75% of <i>CB</i>					324 M. (77.18)	648 M. (154.35)	180 M. (42.88)	Minimum, 300 M. (71.46)	600 M.— <i>I</i> (142.92— <i>I</i>)			360 M. (85.75)
Matr.....	900 M. (214.38) or less.	75% of <i>CB</i>					324 M. (77.18)	648 M. (154.35)	180 M. (42.88)	Minimum, 300 M. (71.46)	600 M.— <i>I</i> (142.92— <i>I</i>)			450 M. (107.19)

for total disability.
* Cabin boys receive disability pension only if fitness for work is decreased because of war or injury received on voyage.

SCHEDULE 16.—Germany. Pensionable salaries of officers of the Imperial Army.

[Schedule according to law of May 31, 1906, R. G. Bl. 1906, p. 565, from M. Adam, *Das Militärversorgungsrecht im Heere, in der Marine und in den Schutztruppen*. Berlin, 1916, pp. 12-13.]

[Amounts outside of parentheses given in marks; amounts inside of parentheses given in dollars.]

Grade.	Salary.	Service allowance (over 900 M. only two-thirds).	Lodging allowance.	Allowance for servant.	Table money.	Hospital fee.	Total.
1. Commanding general.....	{13,980 (8,330.04)	12,000 (2,858.40)	.....	.....	.....	.....	25,980 (6,188.44)
2. Chief of general staff of army, general inspector of cavalry and foot artillery, chief of engineer and pioneer corps, general inspector of fortresses:							
a. With 18,000 M. (4,287.60) service allowance.....	Like 1.	Like 1.	.....	.....	.....	.....	Like 1.
b. With 12,000 M. (2,858.40) service allowance.....	{13,980 (3,330.04)	8,000 (1,905.60)	.....	.....	.....	.....	21,980 (5,235.64)
3. Commander of division with rank of lieutenant general.....	{13,554 (3,228.56)	3,000 (714.60)	1,404 (334.43)	.....	.....	.....	17,958 (4,277.60)
4. Commander of division with rank of major general and general.....	{10,554 (2,513.96)	3,000 (714.60)	1,404 (334.43)	.....	.....	.....	14,958 (3,563.00)
a. Lieutenant general with salary of his rank but without service allowance.....	{13,554 (3,228.56)	.....	1,404 (334.43)	.....	.....	.....	14,958 (3,563.00)
5. Commander of brigade with rank of major general and officer holding position with same income, sanitary inspector..	{10,260 (2,443.93)	900 (214.88)	1,404 (334.43)	500 (119.10)	.....	.....	13,064 (3,111.84)
6. Major general with salary of his rank but without service allowance.....	{10,260 (2,443.93)	.....	1,404 (334.43)	500 (119.10)	.....	.....	12,164 (2,897.46)
7. Commander of brigade with rank of colonel.....	{9,000 (2,158.09)	900 (214.88)	1,404 (334.43)	500 (119.10)	.....	.....	11,804 (2,826.00)
8. Staff surgeon with rank of regimental commander and officer holding position with same income, surgeon general.....	{8,772 (2,089.49)	.....	1,184 (276.12)	500 (119.10)	.....	.....	10,460 (2,478.71)
9. Commissioned lieutenant colonel with 1,150 M. (273.93) pensionable allowance and first surgeon general (generaloberarzt) with same allowance.....	{7,702 (1,834.62)	.....	874 (208.19)	500 (119.10)	.....	.....	9,076 (2,161.90)
10. Staff officer with rank of commander of battalion and officer holding position with same income, first staff surgeon (oberstabsarzt).....	{6,552 (1,560.09)	.....	874 (208.19)	500 (119.10)	.....	.....	7,926 (1,887.97)
11. Captain, cavalry captain, first officer of supply department (traindepotoffizier), captain of artillery, pyrotechnics, and fortress construction, staff surgeon:							
a. With 5,100 M. (1,214.82) salary....	{5,100 (1,214.82)	.....	874 (208.19)	500 (119.10)	.....	.....	6,474 (1,542.11)
b. With 4,600 M. (1,095.72) salary....	{4,600 (1,095.72)	.....	874 (208.19)	500 (119.10)	.....	.....	5,974 (1,423.01)
c. With 3,400 M. (809.88) salary.....	{3,400 (809.88)	.....	874 (208.19)	500 (119.10)	.....	.....	4,774 (1,137.17)

SCHEDULE 16.—Germany. Pensionable salaries of officers of the Imperial Army—Con.

Grade.	Salary.	Service allow- ance (over 900 M. only two- thirds).	Lodging allow- ance.	Allow- ance for servant.	Table money.	Hospi- tal fee.	Total.
12. First lieutenant, second lieutenant, lieutenant sergeant major:							
a. With 2,400 M. (571.68) salary.....	2,400 (571.68)	.....	378 (90.04)	500 (119.10)	108 (25.73)	100 (23.82)	3,486 (890.37)
b. With 2,100 M. (500.22) salary.....	2,100 (500.22)	.....	378 (90.04)	500 (119.10)	108 (25.73)	100 (23.82)	3,186 (758.91)
c. With 1,900 M. (452.58) salary.....	1,900 (452.58)	.....	378 (90.04)	500 (119.10)	108 (25.73)	100 (23.82)	2,986 (711.27)
d. With 1,700 M. (404.94) salary.....	1,700 (404.94)	.....	378 (90.04)	500 (119.10)	108 (25.73)	100 (23.82)	2,786 (663.63)
e. With 1,500 M. (357.30) salary.....	1,500 (357.30)	.....	378 (90.04)	500 (119.10)	108 (25.73)	100 (23.82)	2,586 (615.99)
13. First surgeon (oberarzt), assistant surgeon:							
a. With 2,400 M. (571.68) salary.....	Like 12 a.						
b. With 2,100 M. (500.22) salary.....	Like 12 b.						
c. With 1,700 M. (404.94) salary.....	Like 12 d.						
14. Second officer of supply department:							
a. With 3,200 M. (762.24) salary.....	.....	.....	378 (90.04)	500 (119.10)	.....	100 (23.82)	4,178 (995.20)
b. With 3,050 M. (726.51) salary.....	.....	.....	378 (90.04)	500 (119.10)	.....	100 (23.82)	4,028 (959.47)
c. With 2,900 M. (690.78) salary.....	.....	.....	378 (90.04)	500 (119.10)	.....	100 (23.82)	3,878 (923.74)
d. With 2,750 M. (655.05) salary.....	.....	.....	378 (90.04)	500 (119.10)	.....	100 (23.82)	3,728 (888.01)
e. With 2,600 M. (619.32) salary.....	.....	.....	378 (90.04)	500 (119.10)	.....	100 (23.82)	3,578 (852.28)
15. First lieutenant, lieutenant of artillery, pyrotechnics, fortress construction:							
a. With 3,100 M. (738.42) salary.....	3,100 (738.42)	.....	546 (130.06)	500 (119.10)	.....	100 (23.82)	4,246 (1,011.40)
b. With 2,900 M. (690.78) salary.....	2,900 (690.78)	.....	546 (130.06)	500 (119.10)	.....	100 (23.82)	4,046 (963.76)
c. With 2,600 M. (619.32) salary.....	2,600 (619.32)	.....	546 (130.06)	500 (119.10)	.....	100 (23.82)	3,746 (892.30)
d. With 2,300 M. (547.86) salary.....	2,300 (547.86)	.....	546 (130.06)	500 (119.10)	.....	100 (23.82)	3,446 (820.84)
e. With 2,000 M. (476.40) salary.....	2,000 (476.40)	.....	465 (110.76)	500 (119.10)	.....	100 (23.82)	3,146 (749.38)

SCHEDULE 17.—Germany. Pensionable salaries of officers and petty officers of the Imperial Navy.¹

[Schedule according to law of May 31, 1906, R. G. Bl. 1906, p. 565, from M. Adam, *Das Militärversorgungsrecht im Heere, in der Marine, und in den Schutztruppen*. Berlin, 1916, pp. 36-37.]

[Amounts outside of parentheses are in marks; amounts inside of parentheses are in dollars.]

Grade.	Salary.	Service allowance (if over 900 M. only two-thirds).	Extra pay.	Lodging allowance.	Allowance for servant.	Table money.	Hospital fee.	Total
1. Admiral.....	{ 13,980 (3,330.04)	12,000 (2,858.40)						25,980 (6,188.44)
2. Vice admiral, staff surgeon general of Navy as soon as he is given rank of vice admiral...	{ 13,554 (3,228.56)	3,000 (714.60)		1,404 (334.43)	500 (119.10)			17,958 (4,277.60)
3. Rear admiral (as chief of the Navy cabinet, or as department director)...	{ 10,260 (2,443.93)	3,000 (714.60)	294 (70.03)	1,404 (334.43)	500 (119.10)			15,458 (3,682.10)
4. Staff surgeon general of Navy	{ 10,260 (2,443.93)	3,000 (714.60)		1,404 (334.43)	500 (119.10)			15,164 (3,612.06)
5. Rear admiral with rank of station chief.....	{ 10,260 (2,443.93)	900 (214.38)	294 (70.03)	1,404 (334.43)	500 (119.10)			13,358 (3,181.88)
6. Rear admiral.....	{ 10,260 (2,443.93)	900 (214.38)		1,404 (334.43)	500 (119.10)			13,064 (3,111.84)
7. Naval captain, inspector of marine infantry, surgeon general.....	{ 8,772 (2,089.49)			1,134 (270.12)	500 (119.10)			10,406 (2,478.71)
8. Captain of frigate, chief surgeon general (Generaloberarzt), with bonus.....	{ 6,552 (1,560.69) 1,150 (273.93)			874 (208.19)	500 (119.10)			9,076 (2,161.90)
9. Captain of frigate, chief surgeon general without bonus, captain of corvette, commander of sea battalion, chief staff surgeon.....	{ 6,552 (1,560.69)			874 (208.19)	500 (119.10)			7,926 (1,887.97)
10. Lieutenant captain, captain, staff surgeon, lieutenant captain of pyrotechnics, lieutenant captain of torpedoes:								
a. With 5,100 M. (1,214.82) salary..	{ 5,100 (1,214.82)			874 (208.19)	500 (119.10)			6,474 (1,542.11)
b. With 4,600 M. (1,095.72) salary..	{ 4,600 (1,095.72)			874 (208.19)	500 (119.10)			5,974 (1,423.01)
c. With 3,400 M. (809.88) salary..	{ 3,400 (809.88)			874 (208.19)	500 (119.10)			4,774 (1,137.17)
11. First lieutenant, second lieutenant:								
a. With 2,400 M. (571.68) salary..	{ 2,400 (571.68)			378 (90.01)	500 (119.10)	108 (25.73)	100 (23.82)	3,486 (830.37)
b. With 2,100 M. (500.22) salary..	{ 2,100 (500.22)			378 (90.01)	500 (119.10)	108 (25.73)	100 (23.82)	3,186 (758.91)
c. With 1,900 M. (452.58) salary..	{ 1,900 (452.58)			378 (90.01)	500 (119.10)	108 (25.73)	100 (23.82)	2,986 (711.27)
d. With 1,700 M. (401.94) salary..	{ 1,700 (401.94)			378 (90.01)	500 (119.10)	108 (25.73)	100 (23.82)	2,786 (663.63)
e. With 1,500 M. (357.30) salary..	{ 1,500 (357.30)			378 (90.01)	500 (119.10)	108 (25.73)	100 (23.82)	2,586 (615.99)

¹ For officers of the medical corps there are in addition the bonuses for length of service and for voyages, drawn at sailing, and for the Navy engineers the bonus for voyages.

SCHEDULE 17.—Germany. Pensionable salaries of officers and petty officers of the Imperial Navy—Continued.

Grade.	Salary.	Service allowance (if over 900 M. only two- thirds).	Extra pay.	Lodging allow- ance.	Allow- ance for servant.	Table money.	Hos- pital fees.	Total.
12. Chief assistant surgeon, assistant surgeon:								
a. With 2,400 M. (571.68) salary..	Like 11 a							
b. With 2,100 M. (500.22) salary..	Like 11 b							
c. With 1,700 M. (404.94) salary..	Like 11 d							
13. First lieutenant and sec- ond lieutenant of pyro- technics and torpe- does:								
a. With 3,100 M. (738.42) salary..	3,100 (738.42)	.....	.....	546 (130.06)	500 (119.10)	.....	100 (23.82)	4,246 (1,011.40)
b. With 2,900 M. (690.78) salary..	2,900 (690.78)	.....	.....	546 (130.06)	500 (119.10)	.....	100 (23.82)	4,046 (963.76)
c. With 2,700 M. (643.14) salary..	2,700 (643.14)	.....	.....	546 (130.06)	500 (119.10)	.....	100 (23.82)	3,846 (916.12)
d. With 2,500 M. (595.50) salary..	2,500 (595.50)	.....	.....	546 (130.06)	500 (119.10)	.....	100 (23.82)	3,646 (868.48)
14. Chief engineer of Navy, with bonus.....	7,302 (1,739.34) 1,150 (273.93)	.....	.....	874 (208.19)	500 (119.10)	.....	.....	9,826 (2,340.55)
15. Chief engineer of Navy, without bonus, chief staff engineer of navy (oberstabsingenieur), chief staff engineer of torpedo corps.....	7,302 (1,739.34)	.....	.....	874 (208.19)	500 (119.10)	.....	.....	8,676 (2,066.62)
16. Staff engineer of Navy, staff engineer of torpe- does.....	6,800 (1,619.76)	.....	.....	874 (208.19)	500 (119.10)	.....	.....	8,174 (1,947.05)
17. First engineer of Navy, first engineer of torpe- does.....	5,200 (1,238.64)	.....	.....	378 (90.04)	500 (119.10)	.....	100 (23.82)	6,178 (1,471.60)
18. Engineer of Navy, engi- neer of torpedoes.....	4,200 (1,000.44)	.....	.....	378 (90.04)	500 (119.10)	.....	100 (23.82)	5,178 (1,233.40)
19. First petty officer (Deck- offizier).....	1 2,580 (613.56)	.....	.....	.....	.....	.....	100 (23.82)	2,680 (638.38)
20. Petty officer.....	1 2,100 (500.22)	.....	.....	.....	.....	.....	100 (23.82)	2,200 (524.04)

¹ And the voyage and specialist's bonus drawn at sailing.

SCHEDULE 18.—Germany. Pensionable salaries of Army officers and the annual amounts of pension due them, bonuses not included.

[Source. M. Adam, *Das Militärversorgungswesen im Heere, in der Marine, und in den Schutztruppen*, Berlin, 1916, Appendix I.]

[Amounts outside of parentheses are in marks; amounts inside of parentheses are in dollars.]

Grade.	Pension- able yearly salary.	Amount of annual pension according to years of service ¹ and corresponding fraction of pensionable salary.											
		10	11	12	13	14	15	16	17	18	19	20	
1. Commanding general.....	{ 25,950 (6,188.44)	20/60	21/60	22/60	23/60	24/60	25/60	26/60	27/60	28/60	29/60	30/60	
2. Chief of general staff of Army, general inspector of cavalry and foot artillery, chief of the engi- neer and pioneer corps, general inspector of fortresses: a. With 18,000 M. (4,287.60) service } Like 1. allowance. b. With 12,000 M. (2,858.40) service allow- ance.....	{ 21,900 (5,235.64)												
3. Division commander with rank of lieutenant general.....	{ 17,958 (4,277.60)												
4. Major general if major general is salary of his grade.....	{ 14,958 (3,583.00)												
5. General if general income,	{ 13,064 (3,111.85)												
6. Major general with salary of his grade, but with- out service allowance.....	{ 12,164 (2,897.46)												
7. Brigade commander with rank of colonel.....	{ 11,864 (2,826.00)												
8. Staff officer with rank of regimental commander and officer holding position with like income, surgeon general.....	{ 10,406 (2,478.71)												
9. Commissioned lieutenant colonel with 1,150 M. (273.93) pensionable allowance, and first sur- geon general (Generaloberarzt) with same.....	{ 9,076 (2,161.90)											4,839 (1,081.19)	

¹ For years of service 21 to 30, see p. 90; from 31 to 40, p. 92.

[Amounts outside of parentheses are in marks; amounts inside of parentheses are in dollars.]

Amount of annual pension according to years of service and corresponding fraction of pensionable salary.

	10	11	12	13	14	15	16	17	18	19	20
	10/60	21/60	22/60	23/60	24/60	25/60	26/60	27/60	28/60	29/60	30/60
10. Staff officer with rank of battalion commander and officer holding position with same income, head staff surgeon.....	7,926 (1,887.97)	2,775 (601.01)	2,907 (662.45)	3,039 (703.80)	3,171 (735.33)	3,303 (766.77)	3,435 (818.22)	3,567 (849.66)	3,699 (881.10)	3,831 (912.54)	3,963 (943.99)
11. Officer of supply y, pyrotechnics, [surgeon:											
a. With 5,100 M. (1,214.82) salary.....	6,474 (1,542.11)	2,268 (540.24)	2,376 (565.96)	2,484 (591.69)	2,592 (617.41)	2,700 (643.14)	2,808 (668.87)	2,916 (694.59)	3,024 (720.32)	3,132 (746.04)	3,240 (771.76)
b. With 4,800 M. (1,065.72) salary.....	5,974 (1,423.00)	2,081 (496.08)	2,183 (522.37)	2,282 (545.95)	2,391 (569.54)	2,490 (593.12)	2,589 (616.70)	2,691 (641.00)	2,790 (664.58)	2,889 (688.16)	2,988 (711.74)
c. With 3,400 M. (809.88) salary.....	4,774 (1,137.17)	1,671 (398.03)	1,762 (417.33)	1,853 (436.62)	1,911 (456.20)	1,992 (474.49)	2,070 (493.07)	2,151 (512.37)	2,229 (530.95)	2,310 (550.24)	2,388 (568.82)
12. First lieutenant, second lieutenant, lieutenant sergeant major (10, Aht. 2):											
a. With 2,400 M. (571.68) salary.....	3,388 (830.37)	1,221 (290.81)	1,281 (305.13)	1,338 (318.71)	1,395 (332.29)	1,455 (346.58)	1,512 (360.16)	1,569 (373.74)	1,626 (388.03)	1,686 (401.61)	1,743 (415.18)
b. With 2,100 M. (500.22) salary.....	3,186 (758.90)	1,116 (265.83)	1,170 (278.69)	1,224 (291.56)	1,275 (303.71)	1,329 (316.57)	1,383 (329.43)	1,434 (341.58)	1,488 (354.44)	1,542 (367.30)	1,593 (379.45)
c. With 1,900 M. (449.58) salary.....	2,986 (711.27)	1,047 (249.40)	1,096 (260.83)	1,146 (272.98)	1,197 (285.13)	1,245 (296.66)	1,296 (308.71)	1,344 (320.14)	1,396 (332.20)	1,446 (344.44)	1,494 (355.87)
d. With 1,700 M. (404.94) salary.....	2,788 (683.63)	980 (232.90)	1,039 (243.68)	1,088 (254.40)	1,116 (265.83)	1,161 (276.55)	1,209 (287.98)	1,254 (298.70)	1,302 (310.14)	1,347 (320.86)	1,395 (332.29)
e. With 1,500 M. (367.30) salary.....	2,588 (615.99)	906 (215.81)	951 (226.53)	993 (236.53)	1,036 (246.34)	1,080 (257.20)	1,122 (267.36)	1,164 (277.26)	1,209 (287.96)	1,251 (297.99)	1,293 (307.99)
13. First surgeon, assistant surgeon:											
a. With 2,400 M. (571.68) salary.....											
b. With 2,100 M. (500.22) salary.....											
c. With 1,700 M. (404.94) salary.....											

Like 12,
a, b, c,

14. Second officer of supply department:

a. With 3,200 M. (762.24) salary.....	1,176 (995.30)	1,395 (332.29)	1,164 (348.72)	1,533 (365.16)	1,602 (381.60)	1,671 (398.75)	1,743 (415.18)	1,812 (431.62)	1,881 (448.06)	1,950 (464.49)	2,022 (481.64)	2,091 (498.08)
b. With 3,050 M. (726.51) salary.....	4,028 (959.47)	1,344 (320.14)	1,410 (335.86)	1,479 (352.30)	1,545 (368.02)	1,614 (384.45)	1,680 (400.18)	1,746 (415.90)	1,815 (432.33)	1,881 (448.06)	1,947 (463.78)	2,016 (480.21)
c. With 2,900 M. (690.78) salary.....	3,878 (923.74)	1,293 (307.99)	1,359 (323.71)	1,422 (338.72)	1,488 (354.44)	1,554 (370.16)	1,617 (385.17)	1,683 (400.89)	1,746 (415.90)	1,812 (431.62)	1,878 (446.63)	1,941 (462.35)
d. With 2,750 M. (655.06) salary.....	3,728 (888.01)	1,245 (296.56)	1,305 (310.85)	1,368 (325.86)	1,431 (340.86)	1,494 (355.87)	1,554 (370.16)	1,617 (385.17)	1,680 (400.18)	1,740 (414.47)	1,803 (429.47)	1,866 (444.45)
e. With 2,600 M. (619.32) salary.....	3,578 (852.26)	1,194 (284.41)	1,254 (298.70)	1,314 (312.99)	1,374 (327.29)	1,434 (341.58)	1,491 (355.16)	1,551 (369.45)	1,611 (383.74)	1,671 (398.03)	1,731 (412.32)	1,791 (426.62)

15. First lieutenant and second lieutenant of artillery, pyrotechnics, and fortrees construction:

a. With 3,100 M. (738.42) salary.....	4,246 (1,011.40)	1,416 (337.29)	1,488 (354.44)	1,557 (370.88)	1,629 (388.03)	1,701 (405.18)	1,770 (421.61)	1,842 (438.76)	1,911 (455.20)	1,983 (472.35)	2,055 (489.50)	2,124 (505.94)
b. With 2,900 M. (690.78) salary.....	4,046 (963.76)	1,350 (321.57)	1,419 (338.01)	1,485 (353.73)	1,551 (369.45)	1,620 (385.88)	1,686 (401.61)	1,755 (418.04)	1,821 (433.76)	1,890 (450.20)	1,956 (465.92)	2,025 (482.36)
c. With 2,600 M. (619.32) salary.....	3,746 (892.30)	1,251 (297.99)	1,314 (312.99)	1,374 (327.29)	1,437 (342.29)	1,500 (357.30)	1,563 (372.34)	1,626 (387.31)	1,686 (401.61)	1,749 (416.61)	1,812 (431.62)	1,875 (446.63)
d. With 2,300 M. (547.86) salary.....	3,446 (820.84)	1,149 (273.69)	1,209 (287.98)	1,266 (301.56)	1,323 (315.14)	1,380 (328.72)	1,437 (342.29)	1,494 (355.87)	1,551 (369.45)	1,611 (383.74)	1,668 (397.32)	1,725 (410.90)
e. With 2,000 M. (476.40) salary.....	3,146 (749.38)	1,050 (250.11)	1,104 (262.97)	1,155 (278.12)	1,208 (297.27)	1,260 (300.13)	1,311 (312.23)	1,365 (325.14)	1,416 (337.29)	1,470 (350.15)	1,521 (362.30)	1,575 (375.17)

SCHEDULE 18 —Germany. Pensionable salaries of Army officers and the annual amounts of pension due them, bonuses not included—Continued

[Amounts outside of parentheses are in marks, amounts inside of parentheses are in dollars.]

Grade.	Pensionable yearly salary.	Amount of annual pension according to years of service and corresponding fraction of pensionable salary.									
		21	22	23	24	25	26	27	28	29	30
		31/80	32/80	33/80	34/80	35/80	36/80	37/80	38/80	39/80	40/80
1. Commanding general.....	{ 25,980 (6,188.44)										{ 17,322 (4,126.10)
2. Chief of general staff of Army, general inspector of cavalry and foot artillery, chief of the engineer and pioneer corps, general inspector of fortresses. a. With 18,000 M. (4,267.60) service allowance. [Lieut.]											
b. With 12,000 M. (2,858.40) service allowance.....	{ 21,980 (5,235.64)										{ 14,655 (3,490.82)
3. Division commander with rank of lieutenant general.....	{ 17,948 (4,277.60)										{ 11,973 (2,851.97)
4. Division commander with rank of major general and lieutenant general with the salary of his grade but no service allowance	{ 14,658 (3,563.00)										{ 9,972 (2,275.28)
5. Brigade commander with rank of major general and officer holding position with same income, sanitary inspector.	{ 13,064 (3,111.86)										{ 8,712 (2,075.90)
6. Major general with salary of his grade but without service allowance.	{ 12,164 (2,907.46)										{ 8,112 (1,932.28)
7. Brigade commander with rank of colonel.....	{ 11,864 (2,828.00)										{ 7,911 (1,884.40)
8. Staff officer with rank of regimental commander and officer holding position with like income, surgeon general.	{ 10,406 (2,478.71)					{ 6,072 (1,444.26)	{ 6,946 (1,657.80)	{ 6,420 (1,520.24)	{ 6,801 (1,609.98)	{ 6,765 (1,611.42)	{ 6,939 (1,632.87)
9. d. With 1,150 M. (278.93) pension surgeon general (General).	{ 9,076 (2,161.90)	{ 4,609 (1,117.68)	{ 4,842 (1,163.36)	{ 4,992 (1,186.09)	{ 5,145 (1,225.54)	{ 5,298 (1,261.27)	{ 5,448 (1,297.71)	{ 5,598 (1,323.44)	{ 5,751 (1,369.80)	{ 5,901 (1,406.03)	{ 6,051 (1,441.25)
10. Staff officer with rank of battalion commander and officer holding position with same income, head staff surgeon.	{ 7,928 (1,897.97)	{ 4,098 (978.14)	{ 4,250 (1,007.59)	{ 4,362 (1,039.68)	{ 4,494 (1,070.47)	{ 4,626 (1,101.91)	{ 4,758 (1,133.38)	{ 4,890 (1,164.85)	{ 5,022 (1,196.24)	{ 5,154 (1,227.68)	{ 5,286 (1,259.12)

[illegible]

[Amounts outside of parentheses are in marks; amounts inside of parentheses are in dollars.]

Amount of annual pension according to years of service and corresponding fraction of pensionable salary.											
Grade.	Pensionable yearly salary.	31	32	33	34	35	36	37	38	39	40
		31/120	32/120	33/120	34/120	35/120	36/120	37/120	38/120	39/120	40/120
1. Commanding general.....	{ 26,960 (6,188.44)	{ 17,538 (4,177.55)	{ 17,754 (4,220.00)	{ 17,970 (4,260.45)	{ 18,186 (4,301.91)	{ 18,405 (4,364.07)	{ 18,621 (4,435.52)	{ 18,837 (4,486.97)	{ 19,053 (4,538.42)	{ 19,269 (4,589.88)	{ 19,485 (4,641.33)
2. Chief or general inspector of fortresses: a. With 18,000 M. (4,267.60) service allowance..... b. With 12,000 M. (2,838.40) service allowance.....	{ 21,960 (5,255.64)	{ 14,838 (3,534.41)	{ 15,021 (3,578.00)	{ 15,204 (3,621.59)	{ 15,387 (3,665.18)	{ 15,570 (3,708.77)	{ 15,753 (3,752.36)	{ 15,936 (3,795.96)	{ 16,119 (3,839.55)	{ 16,302 (3,883.14)	{ 16,485 (3,926.73)
3. Division commander with rank of lieutenant general.....	{ 17,968 (4,277.60)	{ 12,128 (2,887.70)	{ 12,273 (2,923.43)	{ 12,418 (2,959.16)	{ 12,563 (2,994.89)	{ 12,723 (3,030.62)	{ 12,870 (3,065.63)	{ 13,020 (3,101.36)	{ 13,170 (3,137.09)	{ 13,320 (3,172.82)	{ 13,470 (3,208.55)
4. Division commander with rank of major general and lieutenant general with the salary of his grade but no service allowance.	{ 14,966 (3,563.00)	{ 10,088 (2,405.34)	{ 10,224 (2,435.36)	{ 10,347 (2,464.66)	{ 10,473 (2,494.67)	{ 10,596 (2,523.97)	{ 10,722 (2,553.98)	{ 10,845 (2,583.28)	{ 10,971 (2,613.29)	{ 11,094 (2,642.99)	{ 11,220 (2,672.60)
5. Brigade commander with rank of major general and officer holding position with same income, sanitary inspector.	{ 13,064 (3,111.85)	{ 8,530 (2,100.92)	{ 8,628 (2,126.65)	{ 8,726 (2,152.38)	{ 8,824 (2,178.32)	{ 8,922 (2,204.54)	{ 9,020 (2,230.27)	{ 9,118 (2,256.71)	{ 9,216 (2,282.43)	{ 9,314 (2,308.16)	{ 9,412 (2,333.88)
6. Major general with salary of his grade but without service allowance.	{ 12,164 (2,897.46)	{ 8,211 (1,955.83)	{ 8,313 (1,980.16)	{ 8,415 (2,004.45)	{ 8,517 (2,028.76)	{ 8,619 (2,053.06)	{ 8,718 (2,078.63)	{ 8,820 (2,100.92)	{ 8,922 (2,126.22)	{ 9,024 (2,149.52)	{ 9,125 (2,172.10)
7. Brigade commander with rank of colonel.....	{ 11,864 (2,826.00)	{ 8,010 (1,907.96)	{ 8,109 (1,931.56)	{ 8,208 (1,955.16)	{ 8,307 (1,978.73)	{ 8,406 (2,002.31)	{ 8,505 (2,025.89)	{ 8,604 (2,049.47)	{ 8,703 (2,073.05)	{ 8,802 (2,096.64)	{ 8,901 (2,119.50)
8. Staff officer with rank of regimental commander and officer holding position with like income, surgeon general.	{ 10,406 (2,478.71)	{ 7,026 (1,673.80)	{ 7,113 (1,694.32)	{ 7,200 (1,715.84)	{ 7,287 (1,736.76)	{ 7,371 (1,756.77)	{ 7,456 (1,776.80)	{ 7,545 (1,797.20)	{ 7,632 (1,817.94)	{ 7,719 (1,838.67)	{ 7,806 (1,859.39)

	41/00	42/00	43/00	44/00	45/00
9. Commissioned lieutenant colonel with 1,150 M. (273.93) pensionable allowance, and first surgeon general (Generaloberarzt) with same.	{ 9,076 (2,161.90) 6,204 (1,477.79)	6,354 (1,513.52)	6,507 (1,549.97)	6,657 (1,585.70)	6,807 (1,621.43)
10. Staff officer with rank of battalion commander and officer holding position with same income, head staff surgeon.	{ 7,926 (1,887.97) 5,418 (1,290.57)	5,550 (1,322.01)	5,682 (1,353.45)	5,814 (1,384.89)	5,946 (1,416.34)
11. Captain, cavalry captain, first officer of supply department, captain of artillery, pyrotechnics, and fortress construction, staff surgeon:					
a. With 5,100 M. (1,214.82) salary	{ 6,474 (1,542.11) 4,425 (1,054.04)	4,533 (1,079.76)	4,641 (1,105.49)	4,749 (1,131.21)	4,857 (1,156.94)
b. With 4,600 M. (1,095.72) salary	{ 5,974 (1,423.00) 4,083 (972.57)	4,182 (996.15)	4,284 (1,020.45)	4,383 (1,044.03)	4,482 (1,067.61)
c. With 3,400 M. (809.88) salary	{ 4,774 (1,137.17) 3,264 (777.45)	3,342 (796.06)	3,423 (815.36)	3,501 (833.94)	3,582 (853.23)
12. First lieutenant, second lieutenant, lieutenant sergeant major (10, Abt. 2):					
a. With 2,400 M. (571.68) salary	{ 3,486 (830.37) 2,385 (568.11)	2,442 (581.69)	2,499 (595.26)	2,559 (609.55)	2,616 (623.13)
b. With 2,100 M. (500.22) salary	{ 3,186 (758.90) 2,178 (518.80)	2,232 (531.66)	2,286 (544.53)	2,337 (556.67)	2,391 (569.54)
c. With 1,900 M. (449.58) salary	{ 2,986 (711.27) 2,043 (486.64)	2,091 (498.08)	2,142 (510.22)	2,190 (521.66)	2,241 (533.81)
d. With 1,700 M. (404.94) salary	{ 2,786 (663.63) 1,905 (453.77)	1,953 (465.20)	1,998 (475.92)	2,046 (487.36)	2,091 (498.08)
e. With 1,500 M. (357.30) salary	{ 2,586 (615.99) 1,770 (421.61)	1,812 (431.62)	1,854 (441.62)	1,899 (452.34)	1,941 (462.35)
13. First surgeon, assistant surgeon:					
a. With 2,400 M. (571.68) salary					
b. With 2,100 M. (500.22) salary					
c. With 1,700 M. (404.94) salary					
14. Second officer of supply department:					
a. With 3,200 M. (762.24) salary	{ 4,178 (995.20) 2,826 (673.15)	2,925 (696.74)	2,997 (713.89)	3,066 (730.32)	3,135 (746.76)
b. With 3,050 M. (726.51) salary	{ 4,028 (959.47) 2,754 (656.00)	2,820 (671.72)	2,889 (688.16)	2,953 (703.88)	3,021 (719.60)
c. With 2,900 M. (690.78) salary	{ 3,878 (923.74) 2,652 (631.71)	2,715 (646.71)	2,781 (662.43)	2,844 (677.44)	2,910 (693.16)
d. With 2,750 M. (655.05) salary	{ 3,728 (888.01) 2,550 (607.41)	2,610 (621.70)	2,673 (636.71)	2,736 (651.72)	2,796 (666.01)
e. With 2,600 M. (619.32) salary	{ 3,578 (852.26) 2,445 (582.40)	2,506 (596.69)	2,566 (610.96)	2,626 (626.28)	2,685 (639.37)

SCHEDULE 18 — Pensionable salaries of Army officers and the annual amounts of pension due them, bonuses not included—Continued.

[Amounts outside of parentheses are in marks; amounts inside of parentheses are in dollars.]

Grade.	Pension- able yearly salary.	Amount of annual pension according to years of service and corresponding fraction of pensionable salary.							
		31	32	33	34	37	38	39	40
		41/80	42/80	43/80	44/80				
15. First Lieutenant and second lieutenant of artillery, pyro- technics, and fortress construction:									
a. With 2,100 M. (738.42) salary.....	{ 4,246; (1,011.40)	2,904 (691.73)	2,973 (708.17)	3,043 (725.32)	3,1 (741.7)				
b. With 2,900 M. (690.76) salary.....	{ 4,046; (963.76)	2,706 (658.86)	2,835 (676.30)	2,901 (691.02)	2,9 (707.4)				
c. With 2,600 M. (619.22) salary.....	{ 3,746; (892.30)	2,502 (610.27)	2,625 (625.28)	2,685 (639.57)	2,7 (654.5)				
d. With 2,300 M. (547.86) salary.....	{ 3,446; (820.84)	2,335 (560.96)	2,415 (575.25)	2,472 (598.83)	2,5 (602.4)				
e. With 2,000 M. (476.40) salary.....	{ 3,146; (749.38)	2,151 (512.37)	2,206 (525.23)	2,256 (537.35)	2,3 (550.2)				

SCHEDULE 19.—Germany. Service pensions for noncommissioned officers.

[Source: M. Adam, *Das Militärversorgungswesen im Heere, in der Marine, und in den Schutztruppen*, Berlin, Kameradschaft, 1916, pp. 56-57.]

[Amounts outside of parentheses are in marks; amounts inside of parentheses are in dollars.]

Annual service pension according to length of service and corresponding fraction of pension for total disability.																	
Grade of pensioner.	16	19	20	21	22	23	24	25	26	27	28	30	31	32	33	34	35
Sergeant major.....	{ 450 (107.19)	477 (112.62)	504 (120.06)	531 (126.45)	558 (132.92)	585 (139.35)	612 (145.78)	639 (152.21)	666 (158.64)	693 (165.07)	720 (171.50)	747 (177.94)	801 (190.80)	838 (197.23)	865 (203.66)	892 (210.09)	900 (214.38)
Sergeant.....	{ 360 (84.76)	381 (90.90)	402 (96.04)	423 (101.19)	444 (106.83)	465 (111.48)	486 (116.62)	511.20 (121.77)	532.80 (126.91)	554.40 (132.06)	576.00 (137.20)	597.60 (142.35)	840.80 (152.64)	862.40 (157.78)	884 (162.93)	905.60 (168.07)	920 (171.50)
Under officer (corporal)...	{ 300 (71.46)	315 (75.75)	336 (80.04)	354 (84.32)	372 (88.61)	390 (92.90)	408 (97.19)	426 (101.47)	444 (105.76)	462 (109.05)	480 (114.34)	498 (118.63)	534 (127.20)	552 (131.49)	570 (135.77)	588 (140.06)	600 (142.92)

SCHEDULE 20.—Germany. Pensions for partial disability for noncommissioned officers and enlisted men.

[Source: M. Adam, *Das Militärversorgungswesen im Heere, in der Marine, und in den Schutztruppen*, Berlin, Kameradschaft, 1916, pp. 56-57.]

[Amounts outside of parentheses are in marks; amounts inside of parentheses are in dollars.]

Grade of pensioner.	Annual disability pension according to percentage of disability (loss of earning power).										
	10/100	15/100	20/100	25/100	30/100	33½/100	35/100	40/100	45/100	50/100	55/100
Sergeant major.....	{ 90 (21.44)	{ 135 (32.16)	{ 180 (42.88)	{ 225 (53.60)	{ 270 (64.31)	{ 300 (71.46)	{ 315 (75.03)	{ 360 (85.75)	{ 405 (96.47)	{ 450 (107.19)	{ 495 (117.91)
Sergeant.....	{ 72 (17.15)	{ 108 (25.73)	{ 144 (34.90)	{ 180 (42.88)	{ 216 (51.45)	{ 240 (57.17)	{ 252 (60.03)	{ 288 (68.60)	{ 324 (77.18)	{ 360 (85.75)	{ 396 (94.23)
Under officer (corporal).....	{ 60 (14.29)	{ 90 (21.44)	{ 120 (28.56)	{ 150 (35.73)	{ 180 (42.88)	{ 200.40 (47.74)	{ 210 (50.02)	{ 240 (57.17)	{ 270 (64.31)	{ 300 (71.46)	{ 330 (78.61)
Private.....	{ 54 (12.86)	{ 81 (19.29)	{ 108 (25.73)	{ 135 (32.16)	{ 162 (38.59)	{ 180 (42.88)	{ 189 (45.02)	{ 216 (51.45)	{ 243 (57.88)	{ 270 (64.31)	{ 297 (70.75)

Grade of pensioner.	Annual disability pension according to percentage of disability (loss of earning power).										
	60/100	65/100	66½/100	70/100	75/100	80/100	85/100	90/100	95/100	100/100	
Sergeant major.....	{ 540 (128.68)	{ 585 (139.35)	{ 600 (142.92)	{ 630 (150.07)	{ 675 (160.79)	{ 720 (171.50)	{ 765 (182.22)	{ 810 (192.94)	{ 855 (203.66)	{ 900 (214.38)	
Sergeant.....	{ 432 (102.90)	{ 468 (111.48)	{ 480 (114.24)	{ 504 (120.05)	{ 540 (128.63)	{ 576 (137.20)	{ 612 (145.78)	{ 648 (154.35)	{ 684 (162.93)	{ 720 (171.50)	
Under officer (corporal).....	{ 360 (85.75)	{ 390 (92.90)	{ 400.20 (95.33)	{ 420 (100.04)	{ 450 (107.19)	{ 480 (114.34)	{ 510 (121.48)	{ 540 (128.63)	{ 570 (135.77)	{ 600 (142.92)	
Private.....	{ 324 (77.18)	{ 351 (83.61)	{ 360 (85.75)	{ 378 (90.04)	{ 405 (96.47)	{ 432 (102.90)	{ 459 (109.33)	{ 486 (115.77)	{ 513 (122.20)	{ 540 (128.63)	

SCHEDULE 21.—Germany. The general pension to

Key: *B* equals pensionable active service bonus or bonuses.¹ *DP* equals disability pension (without monetary unit, equivalent to \$0.2382. *P* equals pension to which deceased was, or would have been, been entitled. Minimum for widow's pension is 300M. (\$71.46).⁴ Maximum: Where alternative widow is younger than the deceased. *y* equals number of years in excess of 5 during which widow and served. *u* equals number of years in excess of 18 during which the deceased had served.

[Source: Reichsgesetzblatt, 1906, p. 565; 1906, p. 593; 1907, p. 214; 1912, p. 415; 1914, p. 335.]

[Amounts followed by M. are in marks; other amounts are in dollars.]

Deceased.	Pension, annual amount to widow until remarriage.		
	If widow is not more than 15 years younger than her husband.		If widow is more than 15 years younger than her husband.
	Minimum. ⁴	Maximum.	Minimum. ⁴
			If marriage lasted 5 years or less.
Officer (including medical officer) who was at time of death entitled, either actually or in case of retirement, to a. Life-long pension, or b. Temporary pension. In case b, the pensioning of the widow, etc., is discretionary. ⁷	40% of <i>P</i>	{ 5,000 M. (1,191) or 100% of <i>P</i> .	{ (40—2 <i>x</i>)% of <i>P</i>
Officer (including medical officer) of reserves whose death was due to an injury in the service and who was at time of death entitled to pension, either actually or in case of retirement. Pensioning of the widow, etc., is discretionary. ⁷			
Retired officer temporarily drafted into active service who had left the service. a. Unpensioned, or b. Pensioned, <i>provided</i> , in case b, that marriage followed reentrance into active service. Pensioning of widow, etc., is discretionary. ⁷	300 M. (71.46).....	300 M. (71.46).....	300 M. (71.46).....
Soldier of lower rank (noncommissioned officer ⁸ or private) who died I. After serving 15 years or less a. While in the active service, from any cause, having served at least 10 years, or b. While in the active service (or within 6 years of leaving active service) from an injury sustained in the service.			
II. After serving <i>z</i> years in excess of 15 years a. While in the active service, from any cause. b. Within 6 years of leaving active service, from an injury sustained in the service.	300 M. + 18 <i>z</i> M.....	{ 750 M. or 100% of <i>DP</i> .	{ $\frac{20-i}{20}$ (300 M. + 18 <i>z</i> M.).

¹ The possessions of a deceased member of the Colonial Forces, left behind by him in the colonies may be sent free of charge to the residence of his survivors in the German Empire. Members of the household of the deceased are entitled to free transportation to their homes within a year of his death. See, also, Schedule 23, p. 102.

² *B* for the Army and Colonial Forces is only the good conduct bonus. For the Navy it includes also the bonuses for length of service, for sea voyages, and for specialist's skill. The widow receives the stated percentage of the sum of her husband's bonuses, except that the amount allowed to her on this basis may never exceed one-fifth of the pension to which her husband was, or would have been, entitled for total disability (or 20 per cent of *DP*).

³ In reckoning the 40 per cent of husband's pension to which widow of officer or official is entitled, the amount of the husband's pension does not include his accessory pension for need, nor his bonus for mutilation or for old age. If the widow is entitled to a war pension in addition to her general pension, the amount of her husband's pension which is used as the basis for reckoning her general pension excludes also the bonus which her husband may have received for war, or shipwreck, or Tropics service.

⁴ The minimum of 300 M. as indicated suffers no decrease except when the widow and orphans together receive more than the specified maximum general pension. In this case the separate pensions are decreased

widows and children of officers and enlisted men.¹

bonuses) to which deceased would have been entitled for 100 per cent disability. M. equals marks, German entitled on the day of his death.² WP equals pension to which widow of deceased was, or would have maximums are shown the lower amount applies.³ x equals number of years in excess of 15 by which deceased had been married. z equals number of years in excess of 15 during which the deceased had

[Source: Reichsgesetzblatt, 1906, p. 565; 1906, p. 593; 1907, p. 214; 1912, p. 415, 1914, p. 335.]

[Amounts followed by M. are in marks; other amounts are in dollars.]

Pension, annual amount to widow until remarriage—Continued.		Pension, annual amount to each child ⁶ under 18 years of age and unmarried.		Maximum pension, annual amount, to whole dependent family.
If widow is more than 15 years younger than her husband.				
Minimum. ⁴	Maximum. ⁵	If mother is living and entitled to pension.	If mother is dead, or not entitled to pension.	
If marriage lasted <i>y</i> years in excess of 5 years.				
$(40 - \frac{1}{2}x + \frac{1}{4}y)\%$ of <i>P</i>	$\left\{ \begin{array}{l} 5,000 \text{ M. (1,191) or } 40\% \\ \text{of } P. \end{array} \right\}$	20% of <i>WP</i>	33 $\frac{1}{3}\%$ of <i>WP</i> ...	100% of <i>P</i> .
300 M. (71.46).....	300 M. (71.46).....	60 M. (14.29)...	100 M. (23.82)...	100% of <i>DP</i> .
$\left\{ \begin{array}{l} 20 - \frac{1}{2}x + \frac{1}{4}y \\ 20 \end{array} \right\} (300\text{M.} + 18z \text{ M.})$	300 M. + 18 <i>z</i> M.....	20% of <i>WP</i>	33 $\frac{1}{3}\%$ of <i>WP</i> ...	100% of <i>DP</i> .

proportionately. If widow and orphans together receive more than the specified maximum and if a decrease in the pension is due in addition because of the widow's comparative youth, the widow's and orphans' pensions are first decreased proportionally so that together they do not exceed the 100 per cent disability pension of the deceased soldier; then the widow's pension is decreased on account of her age, and the sum so deducted from the widow's pension is added to the orphan's pensions until all the pensions together are equal to the 100 per cent disability pension of the deceased. (See p. 106.) If one of the beneficiaries dies, the remaining benefits increase up to their ordinary value, provided the maximum for the whole family is not exceeded.

¹ If in any case the maximum indicated for widow who is not more than 15 years younger than her husband proved to be less than that indicated for the widow who is 15+x years younger than her husband, this smaller maximum would apply to the younger widow.

² Legitimate or legitimated.
³ By consent of the highest military or marine administrative authority of the contingent or of the central colonial administration.

⁴ For dependents of noncommissioned officers in the Navy ranking as deck officers pension is reckoned like that for dependents of commissioned officers.

SCHEDULE 21.—Germany. The general pension to widows

Deceased.	Pension, annual amount to widow until remarriage.		
	If widow is not more than 15 years younger than her husband.		If widow is more than 15 years younger than her husband.
	Minimum.	Maximum.	Minimum.
			If marriage lasted 5 years or less.
Soldier of lower rank, etc.—Continued.			
III. In active service (under conditions I. or II. a) and while in receipt of a pensionable bonus (symbolized by B): ¹			
a. Having served 15 years or less.	300 M.+15% of B..	300 M.+20% of DP	$\frac{20-x}{20}(300\text{ M.}+15\%$ of B).
b. Having served z years in excess of 15.	300 M.+18z M.+ 15% of B.	100% of DP+ 37.5% of B.	$\frac{20-x}{20}(300\text{ M.}+18z$ M.+15% of B).
c. Having served u years in excess of 18 and z years in excess of 15.	300 M.+18z M.+ 15% of B+.9u% of B.	100% of DP+ 37.5% of B, or 750 M.+30% of B.	$\frac{20-x}{20}(300\text{ M.}+18z$ M.+15% of B +.9u% of B).
IV. While entitled to a pension for 18 years of service, from any cause.	300 M.+18z M....	750 M. or 100% of DP or 100% of P.	$\frac{20-x}{20}(300\text{ M.}+18z$ M.).
V. While entitled to a pension (from any cause after 18 years of service or from injury sustained in the service) including a pensionable bonus (symbolized by B):			
a. Having served 15 years or less.	300 M.+30% of B..	300 M.+20% of DP	$\frac{20-x}{20}(300\text{ M.}+30\%$ of B).
b. Having served z years in excess of 15.	300 M.+18z M.+ 30% of B.	100% of DP+75% of B.	$\frac{20-x}{20}(300\text{ M.}+18z$ M.+30% of B).
Official ¹ who died as result of injury sustained in military service and who was entitled to a pension (or would have been entitled on retirement), provided marriage took place before retirement from standing Army. The pensioning of the widow is, however, discretionary. ²	40% of DP.....	3,500 M. (833.70) or 100% of P.	40% of P-2x% of P.
Member of voluntary medical corps in time of war who died as result of injury in battle within 6 years after conclusion of peace and who was entitled (either actually or in case of retirement) to a pension, provided marriage took place before the end of service on field of battle.	300 M. (71.46).....	3,500 M. (833.70) or 100% of DP.	300 M. (71.46).....

¹ Includes official of reserves, official of civil administration or of the church who acts as official of Army in time of war, or any other person attached to the Army as an official in time of war.

and children of officers and enlisted men—Continued.

Pension, annual amount to widow until remarriage—Continued.		Pension, annual amount to each child under 18 years of age and unmarried.		Maximum pension, annual amount, to-whole dependent family.
If widow is more than 15 years younger than her husband.				
Minimum.	Maximum.	If mother is living and entitled to pension.	If mother is dead, or not entitled to pension.	
If marriage lasted y years in excess of 5 years.				
$\frac{20-x+2y}{20}$ (300 M.+15% of B).	300 M.+15% of B.....	20% of WP....	33½% of WP...	100% of DP+37.5% of B.
$\frac{20-x+2y}{20}$ (300 M.+18z M.+15% of B).	300 M.+18z M.+15% of B.	20% of WP....	33½% of WP...	100% of DP+37.5% of B.
$\frac{20-x+2y}{20}$ (300 M.+18z M.+15% of B+0.9u% of B).	300 M.+18z M.+15% of B+0.9u% of B.	20% of WP....	33½% of WP...	100% of DP+37.5% of B.
$\frac{20-x+2y}{20}$ (300 M.+18z M.).	300 M.+18z M.....	20% of WP....	33½% of WP...	100% of DP or 100% of P.
$\frac{20-x+2y}{20}$ (300 M.+30% of B).	300 M.+20% of DP....	20% of WP....	33½% of WP...	300 M.+20% of DP.
$\frac{20-x+2y}{20}$ (300 M.+18z M.+30% of B).	300 M.+18z M.+30% of B.	20% of WP....	33½% of WP...	100% of DP+75% of B.
40% of P-2x% of P+4y% of P.	3,500 M. (833.70) or 40% of P.	20% of WP....	33½% of WP...	100% of P.
300 M.-15x M.+30yM..	300 M. (71.46) or 100% of DP.	20% of WP....	33½% of WP...	100% of DP.

SCHEDULE 22.—Germany. War pensions (annual amounts) to widows and other dependents of men dying as result of war.¹

[Sources: Reichsgesetzblatt, 1906, pp. 565, 603; 1907, p. 214; 1912, p. 415; 1914, p. 355.]

¹ equals income from all sources after the husband's death.

[Amounts outside of parentheses are in marks; amounts within parentheses are in dollars.]

Beneficiaries: Widows and other dependents of—	Widow's pension until remarriage.			Pension to each child under 18 and unmarried.			Pension to ascendants (father, mother, grand-father, grand-mother) dependent upon the deceased. ⁴
	War pension.		Special allowance (discretionary), ² to widows not entitled to war pension.	If mother is living and entitled to pension.		If mother is dead or not entitled to pension.	
	If general pension is granted.	If general pension is not granted.		Additional allowance for officers' widows only (discretionary).	If general pension is granted.		
Officers, including medical officers, officers of aviation corps, officers of voluntary medical corps, and officials of equivalent rank:							
General, or officer acting as general.....	1,500 M. (357.30)	2,000 M. (476.40)	3,000 M.-f (714.60-f)	150 M. ¹ (35.73)	200 M. (47.64)	225 M. ¹ (53.00)	450 M. (107.19)
Staff officer, all ranks below general and above captain.	1,500 M. (357.30)	1,800 M. (381.12)	2,000 M.-f (476.40-f)	200 M. (47.64)	200 M. (47.64)	300 M. (71.46)	450 M. (107.19)
Captain, first lieutenant, second lieutenant.....	1,200 M. (285.84)	1,200 M. (285.84)	2,000 M.-f (476.40-f)	200 M. (47.64)	200 M. (47.64)	300 M. (71.46)	450 M. (107.19)
Warrant officer.....	1,200 M. (285.84)	1,200 M. (285.84)	1,500 M.-f (357.30-f)	200 M. (47.64)	200 M. (47.64)	300 M. (71.46)	450 M. (107.19)
Chief guard or section leader	300 M. (71.46)	600 M. (142.92)	800 M.-f (182.92-f)	108 M. (25.73)	108 M. (40.02)	140 M. (33.35)	250 M. (59.55)
Private or other person of lower rank of voluntary medical corps.....	200 M. (47.64)	500 M. (119.10)	500 M.-f (119.10-f)	108 M. (25.73)	108 M. (40.02)	140 M. (33.35)	250 M. (59.55)
	100 M. (23.82)	400 M. (96.36)	400 M.-f (96.36-f)	108 M. (25.73)	108 M. (40.02)	140 M. (33.35)	250 M. (59.55)

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1. The number of dependents of the military forces is estimated at 1,000,000.

SCHEDULE 23.—Germany. *Gratuities granted to dependents of officers and enlisted men dying in the service or while in receipt of pension.*

[Source: Reichsgesetzblatt, 1906, pp. 565,593; 1907, p. 214.]

Stipulations concerning the deceased.	Beneficiary.					
	Widow.	Legitimate or legitimated child.	Other dependents if indigent; and if the deceased had been their entire or chief support, or if he does not leave enough money to cover the expenses of his last illness and burial.			
			Relative in ascending line.	Sister or brother.	Nephew or niece.	Foster child.
1. If pensioner, drawing a monthly pension fee of <i>p</i> M: a single grant following his decease. (If this is granted, the dependent's pension begins 3 months after the soldier's death; otherwise on the day after his death, and for posthumous orphans on the day of their birth.)	3 <i>p</i> .	3 <i>p</i> .	Up to 3 <i>p</i> .	Up to 3 <i>p</i> .	Up to 3 <i>p</i> .	Up to 3 <i>p</i> .
2. If unpensioned, drawing a monthly salary of <i>s</i> M, then killed in active service: a single grant following his decease. (In this case, the dependent's pension begins one month after the soldier's death.)	<i>s</i> .	<i>s</i> .	Up to <i>s</i> .	Up to <i>s</i> .	Up to <i>s</i> .	Up to <i>s</i> .
3. If the second case applies, and if the dependent's pension is <i>d</i> M: a single grant in addition to the pension and to the salary.	2 <i>s</i> .-2 <i>d</i> .	2 <i>s</i> .-2 <i>d</i> .	Up to 2 <i>s</i> .-2 <i>d</i> .	Up to 2 <i>s</i> .-2 <i>d</i> .	Up to 2 <i>s</i> .-2 <i>d</i> .	Up to 2 <i>s</i> - 2 <i>d</i> .
4. If the second case applies, and if the dependents are not entitled to a pension, a single grant in additon to the salary.	2 <i>s</i> .	2 <i>s</i> .	Up to 2 <i>s</i> .	Up to 2 <i>s</i> .	Up to 2 <i>s</i> .	Up to 2 <i>s</i> .

DEPENDENTS' PENSIONS.

(1) A *general pension* is granted to the widow until she remarries, and to every unmarried legitimate or legitimated orphan under 18 years of age. The amount of the benefit depends upon the years of service of the deceased soldier; the time of his marriage; the duration of his married life; the difference in age between himself and his wife; the pension to which he was entitled on the day of his death or to which he would have been entitled had he then retired; and the pensionable bonus or good-conduct pay he had received.

The widow's pension varies from a minimum of 300 marks (\$71.46) a year to a maximum of 5,000 marks (\$1,191) a year; various other maxima are set, such as the pension to which her husband had been entitled or pension for total disability granted for his rank. Where various maxima are set the lowest is effective.

The child's pension is likewise limited either by the pension to which the father had been entitled, or by the 100 per cent disability pension attached to his rank. The same maximum is set for the whole family of children and widow together. Hence, in case this maximum is exceeded, even when the widow receives the minimum sum of 300 marks (\$71.46), all the benefits (including hers) are proportionately decreased until together they amount to the specified maximum. (See Schedule 21, p. 96.)

(2) The *war pension* is granted if the deceased died in battle or as a result of a wound received in war, or suffered other injury in war and died thereof within 10 years of the conclusion of peace. The widow and each child receive sums of money which vary according to the rank of the deceased, and, so far as the child is concerned, according to whether the child is parentless or only fatherless. If the general pension is not granted these beneficiaries, the war pension is increased sometimes as much as 400 per cent. If the widow's income is less than certain fixed maxima, an accessory allowance may be granted her to raise her income to the desired sum. This occurs especially if the widow is not entitled to war pension for survivors of members of the active army, but if her husband was entitled to a pension, or would have been—had he retired on the day of his death—on account of an injury received in the war.

Relatives in ascending line may be granted a war pension in case of need if the deceased had been their entire or chief support before entering the active army, or after leaving it, up to the time of his last illness or death. (See Schedule 22, p. 100.)

(3) *Gratuities* are granted to families of the deceased so that for 3 months after his death they receive (including the dependents' pensions, if they are entitled to these) sums of money equal to the monthly pension or salary of the deceased. (See Schedule 23, p. 102.)

Minimum war pension for the widow of a private.—If the husband died while he was in the standing army after 10 years of service, the widow's general pension is 300 marks (\$71.46). The war pension consists in this case of 100 marks (\$23.82) per year and is granted only if the private died in battle, or as a result of a wound received in war, or suffered other injury in war and died thereof within 10 years of the conclusion of peace. Her total pension is thus 400 marks (\$95.28) a year.

If the general pension is not granted because the soldier served less than 10 years or for some other reason, and the widow is entitled to war pension under the stipulation above mentioned for the award of war pension, her war pension consists of 400 marks (\$95.28). Thus the widow's minimum war pension in either case is 400 marks (\$95.28).

Maximum pension for the widow of a private.—The figures in the accompanying table give the widow's general pension, provided the widow is not more than 15 years younger than her husband.

Years of service.	General pension.	Years of service.	General pension.
1 to 15.....	300 marks (\$71.46)	23.....	444 marks (\$105.76)
16.....	318 marks (\$75.75)	24.....	462 marks (\$110.05)
17.....	336 marks (\$80.04)	25.....	480 marks (\$114.34)
18.....	354 marks (\$84.32)	26.....	498 marks (\$118.62)
19.....	372 marks (\$88.61)	27.....	516 marks (\$122.91)
20.....	390 marks (\$92.90)	28.....	534 marks (\$127.20)
21.....	408 marks (\$97.19)	29.....	540 marks (\$128.63)
22.....	426 marks (\$101.47)	30 and more.....	540 marks (\$128.63)

If the deceased died of an injury sustained in the service, while in the standing army, or within 6 years of leaving active service, the whole table applies; if the deceased died while in the standing army after 10 years of service, the table applies from the tenth year on. The maximum—attained after 29 years of service—is 540 marks (\$128.63).

If the deceased died in retirement, after at least 18 years of service—entitled to a pension at the time of his death—the above table applies from the eighteenth year on, with the proviso that if the pension to which the deceased had been entitled was less than 540 marks (\$128.63), the widow's pension could not exceed this lower amount.

If the deceased died in battle or as a result of a wound received in war, or suffered other injury in war and died thereof within 10 years of the conclusion of peace (stipulation for the award of war pension), the widow will receive 100 marks (\$23.82) war pension in addition to the general pension. Total, 640 marks (\$152.45) a year.

If the widow is not entitled to the general pension, she receives only 400 marks (\$95.28) per year war pension.

Minimum war pension for child of a private.—(a) Child whose mother is living. If the father died after 10 years of service, the child's general pension is 20 per cent of the widow's, i. e., 60 marks (\$14.29). If, in addition, war pension is granted because the father's death was in accordance with the stipulation for the award of war pension above specified, the war pension for the fatherless child is 108 marks (\$25.73); his total pension is therefore 168 marks (\$40.02) per year.

If the general pension is not granted, the fatherless child receives 168 marks (\$40.02) war pension. In either case, therefore, the total pension for the fatherless child is 168 marks (\$40.02) annually.

The general pension of widow and orphan together must not be more than 540 marks (\$128.63). If it is, the general pensions are decreased proportionately, so that together they are equal to 540 marks (\$128.63). If, under these circumstances, a decrease is also due because the widow is more than 15 years younger than her husband, a deduction is next made for this; and the sum so deducted from the widow's pension is added to the child's, until all the general pensions together equal 540 marks (\$128.63).

(b) Full orphan. The full orphan, or the child whose mother is not entitled to the general pension at her husband's death, receives $33\frac{1}{3}$ per cent of the widow's pension, or 100 marks (\$23.82). If the father's death was in accordance with the stipulations for the war pension, the full orphan, or the child whose mother is not entitled to the war pension, receives 140 marks (\$33.35) war pension; his total pension is therefore 240 marks (\$57.17) per year.

If the general pension is not granted, the full orphan (or equivalent) receives 240 marks (\$57.17). In either case the full orphan (or equivalent) receives a total pension of 240 marks (\$57.17) per year.

Maximum pension for child of a private.—(a) Child whose mother is living. The child receives 20 per cent of the general pension granted to the widow, i. e., a general pension of 108 marks (\$25.73). The general pension of the widow and orphans together must not exceed 540 marks (\$128.63). If it does, all the benefits are decreased proportionately until 540 marks (\$128.63) is reached. If the father's death in addition satisfies the stipulation for the award of war pension, each fatherless child receives 108 marks (\$25.73) war pension; his total pension is therefore 216 marks (\$51.45) per year.

If the general pension is not granted, the child receives annually 168 marks (\$40.02) war pension.

(b) Full orphan. The full orphan (i. e., widow's step-child) receives $33\frac{1}{3}$ per cent of the general widow's pension, i. e., 180 marks (\$42.88). If war pension is awarded, the full orphan (or child whose mother is not entitled to a widow's war pension at the time of the father's death) receives 140 marks (\$33.35); his total pension is therefore 320 marks (\$76.22) per year.

If the general pension is not granted, the full orphan receives 240 marks (\$57.17) war pension per year.

Maximum pension for a parent or grandparent.—Only war pension is granted to a parent or grandparent, under the same condition for the soldier's death as before, and only if the deceased had been their entire or chief support before entering the Army, or after leaving the Army, up to the time of his last illness or death. The pension

consists of a maximum of 250 marks (\$59.55) per year for a single beneficiary on behalf of a private or noncommissioned officer, and is granted only in case of need, by consent of the highest military or marine authority of the contingent. The parent or grandparent of an officer receives 450 marks (\$107.19) a year.

*Sample calculation of general pension for a widow and orphans.*¹—A sergeant (Oberfahnenשמied), having served 19 years, received on leaving active service a pension for total disability amounting to 720 marks (\$171.50) plus 180 marks (\$42.88) increase (due to pensionable bonuses amounting to 240 marks), or a total of 900 marks (\$214.38). He died and was survived by a widow more than 21 years younger than himself to whom he had been married 6 years, three children that she had borne to him and three children of a former wife.

The widow's basic annual pension on which the actual pension of the family would depend would include three elements:²

300 marks (\$71.46), the minimum widow's pension.

18 marks (\$4.29), for each year in excess of 15 years that her husband had served, amounting in this case to four times 18 marks, or 72 marks (\$17.15) a year.

30 per cent of her husband's active service bonuses of 240 marks, or 72 marks (\$17.15) a year.

This basic widow's pension would therefore equal 444 marks (\$105.76).

Each of the widow's three children would receive 20 per cent of this widow's pension or 88.80 marks, which according to the law is rounded out to 90 marks (\$21.44), and together they add 270 marks (\$64.31) to the family pension.

Each of the three motherless children would receive 33½ per cent of the widow's pension or 148 marks, which is rounded out to 150 marks (\$35.73), and together they add 450 marks (\$107.19) to the family pension.

The total pension on this basis would amount to 444 marks plus 270 marks plus 450 marks or 1,164 marks (\$277.26). But the total for all dependents must not exceed the pension for total disability to which the husband's grade entitled him plus three-fourths of his pensionable bonuses, or in this case, as we have seen, 900 marks (\$214.38).³

¹ Armee Verordnungsblatt, vol. 41, 1907, p. 252.

² Compare formula, 300 marks plus 18 z marks plus 30 per cent of B, in Schedule 21, p. 98.

³ Compare formula, 100 per cent of DP plus 75 per cent of B, in Schedule 21, p. 98.

In reducing the total family pension from 1,164 marks (\$277.26) to 900 marks (\$214.38) the right proportion between the shares allowed to the widow, the widow's children, and the children of a previous wife must be preserved. As we have seen, the share of a widow's child is 20 per cent or one-fifth of the widow's share, and the share of a motherless child is 33½ per cent or one-third of the widow's share, and this gives the following triple proportion:

Widow : Widow's child : Motherless child :: 15 : 3 : 5.

In this family there are 3 children of the widow and 3 motherless children, so the proportion becomes:

Widow : Widow's children : Motherless children :: 15 : 9 : 15.

The total pension of 900 marks (\$214.38) would therefore be apportioned as follows:

Widow, ⅓ of 900 marks.....	346. 15 marks (\$82. 45).
Widow's children, ⅓ of 900 marks.....	207. 70 marks (\$49. 47).
Motherless children, ⅓ of 900 marks.....	346. 15 marks (\$82. 45).

Again, the widow's share must be reduced because she was more than 15 years younger than her husband, but the reduction is modified by the fact that they had been married more than 5 years. For each year in excess of 15 years that the widow was younger than her husband her pension is reduced by one-twentieth, and for each year in excess of 5 years during which they had been married it is increased by one-tenth. Letting *x* equal the number of years in excess of 15 and *y* the number of years in excess of 5, the following formula develops for finding the widow's proper share:¹

$$\frac{20-x+2y}{20} \times 346.15 \text{ marks } (\$82.45).$$

In this case *x* equals 7 and *y* equals 1, therefore the formula becomes $\frac{20-7+2}{20}$ or $\frac{15}{20}$ or $\frac{3}{4} \times 346.15$ marks (\$82.45), and this equals 259.61 marks (\$61.84).

The amount deducted from the widow's share—86.54 marks (\$20.61)—is distributed among the children so that the share of the widow's children is to the share of the motherless children as 9 is to 15:

Widow's children, ⅔ of 86.54 marks.....	32. 45 marks (\$7. 73).
Motherless children, ⅓ of 86.54 marks.....	53. 09 marks (\$12. 89).

Adding these amounts to the children's original share we have:

Widow's children, 207.70 marks plus 32.45 marks.....	240. 15 marks (\$57. 20).
Motherless children, 346.15 marks plus 53.09 marks.....	400. 24 marks (\$95. 34).

And the family receives as follows:

Widow.....	259. 61 marks (\$61. 84).
Children.....	640. 39 marks (\$152. 54).
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Total.....	900. 00 marks (\$214. 38).

¹ Compare Schedule 21, p. 96.

Discussion of formula for a widow's general pension.—In the charts for pensions of dependents, so many stipulations depending upon variable quantities are attached to certain benefits that the generalized benefit can be expressed concisely only in terms of an algebraic formula. Thus the widow of a reenlisted private or noncommissioned officer who, according to budget, had received a pensionable bonus or good-conduct pay B ; who had died before leaving active service after $(13+u)$ years of service; whose wife had been $(15+x)$ years younger than himself; whose married life with her had lasted $(5+y)$ years, receives a general pension equal to

$$\frac{20-x+2y}{20} \left[(354+18u) \text{ M.} + (15+0.9u) \% \text{ of } B \right] \text{ M. a year.}$$

The maximum is set at $(354+18u) \text{ M.} + [(15+0.9u) \% \text{ of } B] \text{ M. a year.}$

The application of this formula can be illustrated by a concrete case. A sergeant major in the Wurttemberg "Schlossgarde Kompanie" receives by budget in addition to a salary of 745.20 marks (\$177.51) per year, a pensionable bonus ($B=360 \text{ M.}$) or 360 marks (\$85.75). If he had reenlisted and died before leaving active service after 20 years of service ($u=2$) the formula for the widow's pension would have been

$$\frac{20-x+2y}{20} \left[390 \text{ M.} + 16.8\% \text{ of } B \right] = \frac{20-x+2y}{20} (450.48)$$

As there are here only two variables, x and y , the benefits can be shown for different values of x and y in a plane table. The maximum value is 450.48 marks (\$107.30), and the formula applies only for values under the maximum.

LUMP-SUM PAYMENTS.

A lump-sum payment in place of the pension annuity may be granted to disabled soldiers and to widows of enlisted men for the purpose of acquisition or economic improvement of landed property of their own, or cooperation in a mutually advantageous building or colonizing enterprise with the aim of acquiring property of their own, if (a) the claimant is between 21 and 55 years of age (exceptions may be made if he is older than 55) and (b) useful expenditure is guaranteed. The indemnity is based on the age of the claimant, who receives a given multiple of the annual pension fee. The annual pension of a disabled man may include mutilation bonus and war bonus or Tropics bonus to the extent of the war bonus; the annual pension of a widow for this purpose may be not more than 300 marks (\$71.46)

for the widow of a sergeant major¹ or a sergeant of the voluntary medical corps; 250 marks (\$59.55) for the widow of a sergeant, corporal, deputy sergeant or sectional leader of the voluntary medical corps; 200 marks (\$47.64) for the widow of a private or any other person of the lower ranks of the voluntary medical corps.²

Age of claimant.	Multiple of annual pension.	Age of claimant.	Multiple of annual pension.
21.....	18.50	39.....	14.00
22.....	18.25	40.....	13.75
23.....	18.00	41.....	13.50
24.....	17.75	42.....	13.25
25.....	17.50	43.....	13.00
26.....	17.25	44.....	12.75
27.....	17.00	45.....	12.50
28.....	16.75	46.....	12.25
29.....	16.50	47.....	12.00
30.....	16.25	48.....	11.75
31.....	16.00	49.....	11.25
32.....	15.75	50.....	10.75
33.....	15.50	51.....	10.25
34.....	15.25	52.....	9.75
35.....	15.00	53.....	9.25
36.....	14.75	54.....	8.75
37.....	14.50	55.....	8.25
38.....	14.25		

ADMINISTRATION.

Disability pensions.—Pensions to army officers³ are granted by the ministry of war and to navy officers by the imperial navy office. Pensions are paid monthly in advance, and begin at the end of the last month for which the salary was paid.

The right to pension ceases with the officer's return to active military life or with his sentence to prison for high treason or a similar offense.

The pension is suspended:

- (1) For the time the officer is not a subject of the empire;
- (2) When the pensioner is abroad, or his whereabouts are unknown at the time a charge of high treason is lodged against him;
- (3) For the time of his stay in an invalid home;
- (4) In case of temporary entrance into active military service; in this case the amount of salary received is subtracted from the pension;

(5) For the time during which he occupies a post in the civil service.

Pensions to soldiers and sailors⁴ are granted by the same authorities as are officers' pensions.

¹ Or vice sergeant major, or a sergeant with the wages of a sergeant major.

² Reichsgesetzblatt, 1916, p. 680.

³ Law of May 31, 1906, Reichsgesetzblatt, 1906, p. 565

⁴ Ibid., p. 593.

The determination of the degree of incapacity and its connection with the injury received in service is assigned to special military medical authorities. The injured man has the right to show evidence in behalf of his claim. Appeal against a decision may be filed with the next higher authority, and in the last instance with the ministry of war.

As in the case of officers, pensions to soldiers are paid monthly in advance.

The right to pension and other relief ceases with the soldier's return to active military service; also with his sentence for high treason or a similar offense.

The certificate showing claim to a post in the civil service¹ goes out of force when the owner of the certificate retires from civil service with a pension.

The pension and other relief is suspended—

- (1) For the time the pensioner is not a subject of the Empire.
- (2) When the pensioner is abroad or his whereabouts are unknown at the time a charge of high treason is lodged against him.
- (3) For the time of his stay in an invalid home, military hospital, or sanitarium.²

(4) In case of temporary entrance into active military service. In this case the amount of salary received is subtracted from the pension.

A deduction from the pension, varying according to the amount of wages received, is also made during the time the pensioner occupies a civil-service position.

Dependents' pensions.—Pensions to dependents of officers and soldiers are granted by the same authorities as are invalid pensions.

Payment begins at the end of the period for which gratuities (Gnadengebühren) were given, and in their absence with the day after the soldier's death. The regular pensions are paid monthly in advance; the additional gratuities in single payments. General pensions and war pensions are granted simultaneously.

The widow receives the pension until her remarriage or death; an orphan until his or her eighteenth birthday, marriage, or death. The right of the pension is suspended for the time the pensioner is not a subject of the empire.

*Lump-sum payments.*³—Lump-sum payments in place of an annual pension are permitted to a widow or to a disabled soldier on account of a civil-service certificate.

The application must specify at least in a general way the purpose for which the lump sum is intended. The military authorities of

¹ Granted on retirement to disabled noncommissioned officers and men.

² In such cases the pension is given either wholly or partly to the soldier's family, if he had one to support.

³ Circular of July 8, 1916, on the administration of the law on lump-sum payments of war pensions, Reichsgesetzblatt, 1916, p. 684.

the district investigate whether the pensioner had reached his or her twenty-first but not fifty-fifth birthday, and whether for any reason, such as intended remarriage, the forfeiture of the pension is imminent. The central civil authorities of the State investigate the personal and family circumstances of the petitioner. After this the application is sent to the commanding general of the district for decision. Against this decision an appeal may be made to the war ministry, whose decision is final.

Payment is made according to regulations issued by the war ministry in cooperation with the highest civil authorities.

The expenditure of the money is supervised by civil authorities chosen for this purpose by the ministry of war.

In case of remarriage of the widow, the question of refunding the lump sum payment is decided by the ministry of war.

Length of service.—Pensions are in many cases based upon length of service. For the army, navy, and colonial forces the following provisions hold:

(1) Time of service is counted from the day of entering active service until the end of the month in which the officer, and the end of the day on which the private or noncommissioned officer, leaves the service.

(2) Time spent in the service before the eighteenth year of age is reached, is not counted, except in case of war, in which case the count begins with the first day of the war or from the day of entrance into the service in war time.

(3) For every war in which an officer, noncommissioned officer, or private takes part, one year is added to his real time of service. If several wars occur in one year, only one year is added. If a war lasts several years, the Kaiser determines how many war years are to be counted.

(4) Time spent in the civil service of the empire or an allied State is counted for officers.

(5) Time spent in non-European countries (not less than one uninterrupted year of service) counts double with consent of the foreign office, but not if the year is a war year.

(6) Imprisonment of at least one year as a punishment or war imprisonment of at least one year excludes the time of imprisonment from the count. Exceptions to this law are possible with consent of the head of the contingent and of the Kaiser, respectively.

(7) With consent of the highest military authority of the contingent, time spent in military service of a country not belonging to the German Empire may be counted.

For the navy, in addition to the above seven provisions, several others hold.

(8) A voyage of six months or more in foreign waters under the same ship's captain counts double. Foreign waters are those which are not part of the North Sea or Baltic, these being counted up to the Dover-Calais line up to 3 west longitude, 60 north latitude.

(9) A voyage shorter than six months, if very injurious to the health of the crew, may (with the Kaiser's consent) count double.

(10) Time (not less than six uninterrupted months) spent by a member of the Navy not belonging to a ship's crew in the colonies or their unexplored interior, and in the voyages in foreign waters thereunto pertaining, counts double unless the year is a war year.

For the colonial forces, in addition to the first seven provisions, two further ones hold:

(11) Service in the colonies with the colonial forces, if not less than six consecutive months in length, counts double.

(12) Voyages in foreign seas, if not less than six consecutive months in duration, count double, unless the year is a war year.

Stipulations for the reserves show slight further variations.

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GREAT BRITAIN AND BRITISH COLONIES.¹

GREAT BRITAIN.

INTRODUCTION.

In Great Britain four kinds of payments may be made by the State to soldiers and sailors and their dependents. Separation allowances may be paid to wives and other dependents while the man is absent on military or naval duty; special allowances are made to the man if he can prove that obligations contracted before he went into the service must be met at a certain time in order to prevent serious

¹ A separate report entitled "Care of Dependents of Enlisted Men in Canada" was prepared by S. Herbert Wolfe and published by the Children's Bureau in May, 1917 (U. S. Department of Labor, Children's Bureau publication No. 25). The material on Great Britain and the British Colonies in the present report was prepared by Miss Louise Moore.

financial loss to him; disability pensions may be paid to a man injured in the line of duty or suffering from illness contracted or aggravated by duty; pensions may be paid to wives, children, and other dependents in case the man is killed or dies from wounds or injury, the consequence of military or naval duty. Either allowances or pensions may be continued to children beyond the established age limit under special circumstances.

Separation allowances may be paid to wives and legitimate children under 16 years of age, to unmarried wives and their children, to illegitimate children supported by the man before he went into the service under court order or otherwise, and in the absence of wife and children to other persons proved to have been dependent on the soldier or sailor before he entered the service. Separation allowance to the wife depends on the man's making her an allotment from his pay, which is somewhat more than a third of the amount allowed by the State in addition. In the army the allotment is obligatory. The amount of separation allowance made to a wife depends on the rank of the man. The separation allowance payable for each child is not contingent on a man's making any allotment and is the same for the children of men of all ranks. For other dependents the man must make an allotment if separation allowance is requested. A wife and four children of the private of lowest rank receive 25s. (\$6.08) a week, of which the man pays 3s. 6d. (85 cents). Separation allowance to wife and children is in no case withheld because the beneficiary has other means of support.

Special allowances may be paid to enable men to meet financial obligations contracted before they entered service for the following purposes: To pay installments due on furniture or real property, to rent property, to pay interest and installments due on loans, including mortgages, to pay rates or taxes, to pay insurance premiums or fees due for children's schooling. The need for financial assistance must be proved, and the amount paid by the State can not exceed £104 (\$506.12) per annum.

Disability pension is based on the amount of disability and the rank of the disabled man. Various kinds of disability are specified, and the rates paid are proportionate to their ratio to total disability. Total disability for a private is rated at 27s. 6d. (\$6.69) a week, and 20 per cent disability at 5s. 6d. (\$1.34) a week. In addition, a sum is granted for each child, this sum also proportionate to the extent of the father's disability. Provision is made for additional payments in case the man is disabled in such a way as to require the constant attendance of another person. The payment of one-half of the disability pension may be conditional on the man's undergoing treatment or training certified as necessary for his interest. No reduction in the amount of pension granted will be made if earning

capacity is increased by such treatment or training. When a man is undergoing training or treatment he may be paid an additional allowance.

Instead of receiving the disability pension, a man may, if he chooses, be granted a pension based in amount on his prewar income. If he can prove that the pension, with children's allowance, together with his average earnings is less than his prewar earnings, he may be granted a pension which together with his average earnings will equal but not exceed his prewar earnings up to a maximum of 50s. (\$12.16) a week, plus half of any prewar earnings between 50s. (\$12.16) and 100s. (\$24.32) a week. In case a man chooses the prewar earnings instead of the usual disability pension, he loses all disability pension and allowances for children. A similar arrangement can be made by officers up to a higher maximum prewar income.

Commissioned officers also receive disability pensions based on the degree of disability. These vary with the kind of commission—temporary or permanent—held by the officer and also with his rank.

Pensions in case of the death of a soldier or sailor may be paid to wives and legitimate children, to unmarried wives and their children, to illegitimate children, and to other persons previously dependent on the man for support. Pensions are to be paid in case the man is killed in the performance of naval or military duty, dies as a result of wounds or injuries received in the performance of such duty within seven years of receiving such wounds or injuries, or dies of disease certified as contracted or commencing while on active service or as having been aggravated by active service within seven years of his removal from duty on account of such disease, providing the man's death has not been caused by his serious negligence or misconduct. The rates for the widow vary from 21s. 3d. (\$5.17) a week for the widow of a warrant officer Class I, to 13s. 9d. (\$3.34) a week for the widow of a private or marine. In addition a sum is paid for each child until such child is 16. A widow is granted an additional allowance while receiving any course of instruction which the minister of pensions thinks will be of advantage to her.

If a widow can show that the pension paid her together with children's allowances is less than one-half the amount her husband would have received had he been paid on the basis of prewar earnings as described above, she may be paid in lieu of her pension and children's allowances a pension not to exceed one-half of what her husband would have received if pensioned under the prewar earnings scheme.

In addition to widow and children, other dependents may also be pensioned if they can prove prewar dependence. Parents may be pensioned when they become incapable of self-support even if they

were not dependent on the man for support previous to his joining the colors, providing the man was, at the time of beginning his service, an apprentice at a recognized trade or if he was still receiving training in school or had been articulated to a profession.

Widows of army officers receive pensions based on the rank of the deceased and the manner of his death, those killed in action or on flying duty being entitled to the highest rate.

The royal patriotic fund corporation, of which some of the officers are appointed by the King and the rest by the admiralty, army council and other bodies, administer funds collected from private sources for the relief of soldiers, sailors, and their families for whom the allowances and pension prove insufficient. Local committees administer the fund under the orders of the chief or statutory committees. The royal patriotic fund corporation takes into account prewar income and prewar dependence, besides the earning capacity of the applicant for aid. They pay also temporary allowances where no pension is payable out of public funds, and grant supplementary allowances for rent. Since June, 1916, they have administered the private relief for soldiers' and sailors' families which was previously in charge of the soldiers' and sailors' families association and soldiers' and sailors' help society and royal patriotic fund.

ARMY AND NAVY SEPARATION ALLOWANCES.

Separation allowances are payable to persons dependent on the man before mobilization or before his enlistment. Wives and children do not have to prove that they were dependent; other persons must prove the extent of their dependence.

Wives and children are given precedence in the awarding of separation allowances, and they do not have to prove financial need. Wives may receive this allowance if the husband makes an allotment from pay. In the army this allotment is obligatory, except for commissioned officers, and a minimum is fixed. For privates and corporals this minimum is 3s. 6d. (85 cents) a week, and for other ranks 5s. 10d. (\$1.42) a week.¹ If the man can prove that the income of his wife, exclusive of allotment from pay and separation allowance, is equal to the sum of separation allowance and allotment due to wives of men of his rank, he is not required to make any allotment. In the navy, an allotment of 5s. (\$1.22) a week is fixed. This is not obligatory, but no separation allowance is paid unless the allotment is made. In either the army or navy if the man chooses he may make a larger allotment; the separation allowance remains the same, and the total amount is thus increased.

A wife living apart from her husband, and not supported by him is not eligible for separation allowance. On the other hand, if he had

¹ The pay of a private soldier (lowest rank) is 7s. (\$1.70) a week.

contributed to her support, under court order or otherwise, before mobilization or enlistment, she may under some circumstances receive the allowance. In the army she may be treated as a "dependent other than wives and children," up to the amount previously contributed by her husband, but not exceeding the amount payable for a wife under ordinary circumstances. In this case he must make the necessary allotment from pay. Wives of men of the navy, other than reservists or men enlisted "for hostilities," if before the war living apart from their husbands are not entitled to separation allowance, even though contribution toward their support had been made by the husband. The wives of naval reservists and men enlisted "for hostilities" who were, before their enlistment, contributing more than their naval pay now permits them to allot, may be granted some separation allowance if the man allots as much as his pay allows.

Unmarried wives of men both of the army and navy may receive separation allowance as wives, providing the man voluntarily makes the necessary allotment from pay. The woman must prove that she was dependent on the man for support before enlistment or mobilization. The fact of dependence, but not the extent of dependence, has to be proved. In the navy the local old-age pension authorities are made judges of the facts of the case.

For legitimate children a separation allowance is payable, but no allotment from pay in their favor is required. The amount of separation allowance varies with the number of children, and no maximum is set. In both army and navy an additional sum is given for children under the age of 14. The amount of allowance for motherless children is larger than that for children with their mothers. Children of wives living apart from their husbands receive a somewhat different treatment in the army and in the navy. In the army the children of such wives are eligible for separation allowance. If the mother was previously supported by the man, this allowance is the same as for children of wives who were living with their husbands previous to mobilization or enlistment. If the man did not contribute to her support, and she is in consequence not eligible for separation allowance, the children receive separation allowance at the motherless rate, whether they are living with their mother or elsewhere. In the case of the navy, if the separated wife was not previously supported by the man, and is in consequence not eligible for separation allowance, her children get nothing.

Illegitimate children by an unmarried wife have the separation allowance payable to legitimate children. Children of a soldier who are not in the care of the unmarried wife, are eligible for separation allowance. If the father was married, and the illegitimate child was a member of his household, he is treated like the other children; if the illegitimate child was not a member of his household, he re-

ceives nothing. If the illegitimate child of an unmarried soldier was living in his household and no separation allowance is being paid for any dependent, the child may receive the motherless rate of 5 shillings (\$1.22) with no obligation for allotment. If the child of an unmarried soldier, although not living with him, was being supported by him separation allowance is payable up to the amount of such prior maintenance or 5 shillings (\$1.22) a week, whichever is the less provided (1) that separation allowance is being paid for no other dependent; (2) that the soldier makes the allotment from pay required for "dependents other than wives and children."

Separation allowances in respect of children are payable until the child reaches the age of 16. They may be continued up to 21¹ if the child is incapable of earning a living because of bodily or mental infirmity, or if he is an apprentice earning only nominal wages, or is attending technical school, secondary school, or university.

Separation allowance is issuable for dependents other than wives and children if the beneficiary can prove prewar dependence and if neither wife nor child is in receipt of separation allowance. The possession of income from other sources does not debar an applicant otherwise eligible. The maximum is either (1) a sum which, taken with the allotment, will equal the amount of prewar dependence, or (2) the wife's allowance, whichever is the less. The usage as to allotment from pay necessary to secure this separation allowance differs in the army and navy. In the army, the amount is dependent on the allotment. If there is more than one dependent, and the man makes the allotment as for a wife, the first dependent receives allowance as for a wife, and the others as children over 14. In the navy, the reservists and men enlisted "for hostilities" must allot an amount equal to one-half of prewar dependence. The other one-half is then granted as separation allowance. If more than one person has been dependent on one man, the first receives the amount as for a wife, and the others as children over 14. Men of the navy other than reservists or those enlisted for hostilities must allot a sum equal to the allowance they made before the war to the dependent; to this the separation allowance of one-half the amount of the prewar dependence is added. Inmates of asylums, workhouses, reformatories, or any other institution supported from public funds are not eligible for separation allowance.

Separation allowances for the army or navy are not stopped under any circumstances except two: (1) If a man is a deserter (in which case they are renewed if he returns) and (2) if he is wounded or killed. If a soldier is wounded, separation allowances are continued

¹ The rules for the issue of separation allowance for the Navy do not specify to what age allowances may be continued for children under instruction.

for two weeks; if he is killed they are continued for 26 weeks. Allotments from pay stop whenever a man forfeits pay—during absence, detention, imprisonment, or sickness in hospital caused by an offense under the army act. In the case of a penal sentence, they continue until a man is discharged from the army. Both allotments and separation allowances continue if a man is a prisoner of war, and he may begin or increase allotments, after his capture, up to three-fourths of his total pay. Separation allowances and allotments are paid together weekly at the post office indicated by the beneficiary in the application.

Since both soldiers and sailors must be insured under the national insurance act, their wives are eligible to the usual 30s. (\$7.30) maternity benefit for each confinement.

SCHEDULE 25.—*Great Britain, Army. Classification of rank for separation allowances.*

- Class 15.** Acting sergeant major of a unit formed on mobilization.
 Chief warder in charge of a detention branch (for traveling abroad and passage only).
 Warrant officer.
- Class 16.** Chief warder or principal warder of military prison or detention barrack (for traveling abroad and passage).
 Master gunner, third class.
 Quartermaster corporal major (Household Cavalry).
 Quartermaster sergeant.
 Schoolmaster (when not a warrant officer or probationer).
- Class 17.** Color sergeant.
 Squadron corporal major (Household Cavalry).
 Squadron, battery, troop, or company sergeant major.
 Squadron quartermaster corporal (Household Cavalry).
 Squadron, battery, troop, or company quartermaster sergeant.
 Staff corporal (Household Cavalry).
 Staff sergeant.
 Warder and servant, military prison or detention barrack, for traveling abroad and passage.
- Class 18.** Quartermaster sergeant of pensioners.
 Soldier below class 17 employed as clerk in war office (for money allowance only).
- Class 19.** Corporal of horse (Household Cavalry).
 Sergeant.
- Class 20.** Bombardier.
 Corporal.
 Trooper.
 Private.
 Gunner.
 Driver.
 Sapper.
 Second corporal.

SCHEDULE 26.—Great Britain, Army. Weekly separation allowance¹ to wives and children.

[Source: Regulations for the Issue of Army Separation Allowance, Allotments of Pay, and Family Allowance during the Present War, p. 5.]

[Amounts outside of parentheses are in pounds, shillings, and pence; amounts inside parentheses are in dollars.]

Beneficiaries.	Amount of allowance according to rank of soldier.									
	Class 20.		Class 19.		Class 18 and 17.		Class 16.		Class 15.	
	Separation allowance.	Total, including allotment.	Separation allowance.	Total, including allotment.	Separation allowance.	Total, including allotment.	Separation allowance.	Total, including allotment.	Separation allowance.	Total, including allotment.
Wife only.....	£ s. d. 0 9 0 (2.19)	£ s. d. 0 12 6 (3.04)	£ s. d. 0 9 2 (2.23)	£ s. d. 0 15 0 (3.65)	£ s. d. 0 10 8 (2.59)	£ s. d. 0 16 6 (4.01)	£ s. d. 0 16 2 (3.93)	£ s. d. 1 2 0 (5.35)	£ s. d. 0 17 2 (4.18)	£ s. d. 1 3 0 (5.59)
Wife and 1 child.	0 14 0 (3.41)	0 17 6 (4.26)	0 14 2 (3.45)	1 0 0 (4.86)	0 15 8 (3.81)	1 1 6 (5.23)	1 1 2 (5.15)	1 7 0 (6.57)	1 2 2 (5.39)	1 8 0 (6.81)
Wife and 2 children.....	0 17 6 (4.26)	1 1 0 (5.11)	0 17 8 (4.30)	1 3 6 (5.72)	0 19 2 (4.66)	1 5 0 (6.08)	1 4 8 (6.00)	1 10 6 (7.42)	1 5 8 (6.24)	1 11 6 (7.66)
Wife and 3 children.	0 19 6 (4.74)	1 3 0 (5.89)	0 19 8 (4.78)	1 5 6 (6.20)	1 1 2 (5.15)	1 7 0 (6.57)	1 6 8 (6.49)	1 12 6 (7.91)	1 7 8 (6.73)	1 13 6 (8.15)
Wife and 4 children....	1 1 6 (5.23)	1 5 0 (6.08)	1 1 8 (5.27)	1 7 6 (6.69)	1 3 2 (5.64)	1 9 0 (7.05)	1 8 8 (6.97)	1 14 6 (8.39)	1 9 8 (7.22)	1 15 6 (8.64)

¹ For families resident in London postal area, in addition, 3s. 6d. a week (0.85). See also Schedule 27, p. 121.

Each additional child, irrespective of rank of father, 2s. (0.49) a week. Each motherless child, irrespective of rank of father, 5s. (1.22) a week.

SCHEDULE 27.—Great Britain, Army. Special weekly allowance for children under 14 years of age (in addition to ordinary weekly amount of separation allowance for children).¹

[Source: Army Orders, Apr. 1, 1917.]

Number of children under 14 years of age.	Rank of soldier.		Number of children under 14 years of age.	Rank of soldier.	
	Classes 19 and 20.	Classes 17 and 18.		Classes 19 and 20.	Classes 17 and 18.
	s. d.	s. d.		s. d.	s. d.
1.....	2 5(\$0.49)	0 6(\$0.12)	5.....	7 0(\$1.70)	5 6(\$1.34)
2.....	3 6(\$0.85)	2 0(\$0.49)	6.....	8 0(\$1.95)	6 6(\$1.58)
3.....	5 0(\$1.22)	3 6(\$0.85)	7.....	9 0(\$2.19)	7 6(\$1.82)
4.....	6 0(\$1.46)	4 6(\$1.09)	8.....	10 0(\$2.43)	8 6(\$2.07)

¹ This does not apply to classes above 17.

Each additional child, irrespective of rank of father, 1s. (24 cents). Motherless children under 14 years of age receive in addition to the 5s. (\$1.22) payable for each motherless child under 16, allowances as follows: First child, 2s. (49 cents); each additional child, 1s. (24 cents).

SCHEDULE 28.—Great Britain, Navy. Classification of naval and marine ratings for separation allowances.

Sailor.	Marine on ship's books.
Class I. Ordinary seaman..... Able seaman..... Leading seaman, second-class petty officer, and equivalent ratings.	Private. Corporal. Sergeant and equivalent ranks.
Class II. Petty officer, petty officer first class, and equivalent ratings.	Color sergeant and equivalent ranks.
Class III. Chief petty officer and equivalent ratings; warrant officers, Royal Navy.	Warrant officer, class II, quartermaster sergeant and staff sergeant; Royal Marine gunner.
Class IV.....	Warrant officer, Royal Marines (except Royal Marine gunners).

SCHEDULE 29.—Great Britain, Navy. Weekly separation allowances¹ to wives and children.

[Source: Navy Separation Allowance, Extracts from Admiralty Orders, p. 1.]

Beneficiaries.	Amounts payable to families of sailors and marines of—							
	Class I.		Class II.		Class III.		Class IV.	
	Separation allowances.	Total, including allotment.	Separation allowances.	Total, including allotment.	Separation allowances.	Total, including allotment.	Separation allowances.	Total, including allotment.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Wife.....	6 0	11 0	7 0	12 0	8 0	13 0	9 0	14 0
	(\$1.46)	(\$2.68)	(\$1.70)	(\$2.92)	(\$1.96)	(\$3.16)	(\$2.19)	(\$3.41)
Wife and 1 child.....	10 0	15 0	11 0	16 0	12 0	17 0	13 0	18 0
	(\$2.43)	(\$3.65)	(\$2.68)	(\$3.89)	(\$2.92)	(\$4.14)	(\$3.16)	(\$4.38)
Wife and 2 children..	13 0	18 0	14 0	19 0	15 0	20 0	16 0	21 0
	(\$3.16)	(\$4.38)	(\$3.41)	(\$4.62)	(\$3.65)	(\$4.87)	(\$3.89)	(\$5.11)
Wife and 3 children..	15 0	20 0	16 0	21 0	17 0	22 0	18 0	23 0
	(\$3.65)	(\$4.87)	(\$3.89)	(\$5.11)	(\$4.14)	(\$5.35)	(\$4.38)	(\$5.60)
Wife and 4 children..	16 0	21 0	17 0	22 0	18 0	23 0	19 0	24 0
	(\$3.89)	(\$5.11)	(\$4.14)	(\$5.35)	(\$4.38)	(\$5.60)	(\$4.62)	(\$5.84)

¹ These rates are increased by 3s. 6d. (85 cents) a week for families resident in the London postal area. (See also Schedule 30, p. 122.)

Each subsequent child, irrespective of rank or rating of father, 1s. (24 cents) a week. Each motherless child, irrespective of rank or rating of father, 5s. (\$1.22) a week.

SCHEDULE 30.—Great Britain, Navy. Special weekly allowance for children under 14 years of age (payable in addition to ordinary amounts of separation allowance for wives and children).

[Source: Navy Separation Allowance, Extracts from Admiralty Orders, p. 2.]

Number of children under 14.	Weekly amounts payable.			
	Class I.	Class II.	Class III.	Class IV.
	s. d.	s. d.	s. d.	s. d.
1.....	2 0 (\$0.49)	1 0 (\$0.24)		
2.....	3 6 (\$0.85)	2 6 (\$0.61)	1 6 (\$0.36)	0 6 "
3.....	5 0 (\$1.22)	4 0 (\$0.97)	3 0 (\$0.73)	2 0 "
4.....	6 0 (\$1.46)	5 0 (\$1.22)	4 0 (\$0.97)	3 0 "
5.....	7 0 (\$1.70)	6 0 (\$1.46)	5 0 (\$1.22)	4 0 "
6.....	8 0 (\$1.95)	7 0 (\$1.70)	6 0 (\$1.46)	5 0 "
7.....	9 0 (\$2.19)	8 0 (\$1.95)	7 0 (\$1.70)	6 0 "
8.....	10 0 (\$2.43)	9 0 (\$2.19)	8 0 (\$1.95)	7 0 "

For each subsequent child, irrespective of rank or rating of father, 1s. (24 cents). Motherless children under 14 years of age, irrespective of rank or rating of father, receive in addition to the 5s. (\$1.22) payable for each motherless child allowances as follows: First child, 2s. (49 cents); each additional child, 1s. (24 cents).

SCHEDULE 31.—Great Britain, Army. Allotment from pay and separation allowance for dependents other than wives and children.

[Source: Regulations for the Issue of Army Separation Allowance, Allotments from Pay, and Family Allowances during the Present War, p. 54.]

[The amount of separation allowance to dependents other than wife or child is determined for each case. Maximum amounts, varying according to the amount allotted by the soldier, are fixed in the regulations. The minimum allotments required to secure the various maximum allowances are shown in the following schedule.]

Related amounts for class 20.			Related amounts for classes 15 to 19.		
Minimum weekly allotment.	Maximum separation allowance.	Total minimum allotment and maximum separation allowance.	Minimum weekly allotment.	Maximum separation allowance.	Total minimum allotment and maximum separation allowance.
s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
0 7 (\$0.14)	2 5 (\$0.59)	3 0 (\$0.73)	0 7 (\$0.14)	1 11 (\$0.47)	2 6 (\$0.61)
1 2 (\$0.24)	3 10 (\$0.93)	5 0 (\$1.21)	1 2 (\$0.24)	2 10 (\$0.69)	4 0 (\$0.97)
1 9 (\$0.43)	5 9 (\$1.40)	7 6 (\$1.83)	1 9 (\$0.43)	3 9 (\$0.91)	5 6 (\$1.34)
2 4 (\$0.57)	7 2 (\$1.74)	9 6 (\$2.31)	2 4 (\$0.57)	4 8 (\$1.14)	7 0 (\$1.71)
2 11 (\$0.71)	8 7 (\$2.00)	11 6 (\$2.80)	2 11 (\$0.71)	5 7 (\$1.36)	8 6 (\$2.07)
3 6 (\$0.85)	Exceeding 8 7 (\$2.00)	Exceeding 11 6 (\$2.80)	3 6 (\$0.85)	6 6 (\$1.58)	10 0 (\$2.43)
.....			4 1 (\$0.99)	7 5 (\$1.80)	11 6 (\$2.79)
.....			4 8 (\$1.14)	8 4 (\$2.02)	13 0 (\$3.17)
.....			5 3 (\$1.28)	9 3 (\$2.25)	14 6 (\$3.53)
.....			5 10 (\$1.42)	Exceeding 9 3 (\$2.25)	Exceeding 14 6 (\$3.53)

¹ If the amount allotted to these dependents is equal to that allotted to a wife (3s. 6d. for class 20, 2s. 1d. for classes 15 to 19) the dependents receive allowances on the same basis as wife and children over 14 years of age, with no fixed maximum.

ARMY AND NAVY DISABILITY PENSIONS.

If a soldier, seaman, or marine is discharged as medically unfit for further service, such unfitness being certified as either attributable to or aggravated by military or naval service in consequence of the present war, and not being due to the serious negligence or mis-

conduct of the discharged man, he is eligible for a disability pension. The maximum payment is for total disability, and grades of disability are arranged on a percentage basis, with proportionate amounts for the several degrees. The amounts vary according to rank, but the pension for the lowest rank of Army and Navy is the same.

If a man's medical unfitness is neither attributable to nor aggravated by military or naval service, and has not been caused by his negligence or misconduct, he may be granted a gratuity or temporary allowance up to a maximum of £150 (\$729.98).

In addition to his own pension, a man receives pensions for children under the age of 16, or over that age if they are mentally or physically infirm, are apprentices receiving a nominal wage, or are attending a secondary or technical school or a university. The pensions for the children also are in proportion to the father's disability.

If a child is maintained in the army or navy or in any institution wholly or mainly supported from public funds, the allowance granted on his account may be reduced "to the extent of the relief."

Disabled Army men of the lowest rank receive no additional pension for service. For men of the Army above the lowest rank, who are eligible for service pensions, two arrangements are made, of which the man can choose the plan more advantageous to him. By the first, he is entitled to the disability pension of his rank, with no addition for service. By the second, he receives the same rate as a man of the lowest rank, and in addition all the pension to which his service entitles him. In the Navy the same disability pension rate is fixed for men of all ratings. In addition to this, and to the usual service pensions to which the man is eligible, a special pension is given in respect of service, which includes periods of service shorter than those recognized by the ordinary regulations.

Instead of disability, prewar earnings may be made the basis of the award of pension, if the man thinks this arrangement more to his advantage. In this case he must prove that the sum of the pension to which his disability entitles him, plus the children's pensions and the average earnings of which he is capable, is less than his prewar earnings, up to a maximum of 75s. (\$18.24) a week.

Various inducements are offered to make a man submit to treatment or to training which is considered valuable for him. One-half of the pension due him and his children may be withheld if he refuses to undergo the treatment prescribed. If he must be away from home during the treatment or training, he may be paid the amount due for total incapacity, any fees, charges or expenses are paid, and in addition the wife and children receive the pension they would be entitled to if the man were dead, but the cost of his maintenance while away from home may be deducted from his pension.

At the termination of a period of training, the man may be paid 5s. (\$1.22) for every week he was undergoing such training. If the treatment does not necessitate his being away from home for more than part of the time, he receives his disability pension, the children are given their pensions, and he receives 10s. (\$2.44) for every week the treatment required his absentsing himself for part of the time.

If a man's physical disability has not reached its final condition a pension may be granted suitable to the temporary disability. This shall be reviewed from time to time until a permanent assessment is made.

Permanent pensions once granted are not to be decreased on account of any change in the man's earning capacity, whether resulting from training or other cause.

A temporary allowance of 14s. (\$3.41) a week may be granted a man on his discharge until he can be awarded a pension or gratuity.

Since all men of the Army and Navy must be insured under the national insurance act, they are eligible not only for permanent disability benefits due them under the royal warrant for the pensions of soldiers and order in council for the pension of sailors and marines, but also, if totally disabled, to the sum due under the national insurance act. The latter is diminished by 5s. (\$1.22) weekly if the disabled man is in receipt of a pension. The national insurance act expressly states that insured men of the Army and Navy are not eligible for the medical benefit provided by the act.

SCHEDULE 32.—Great Britain. Comparative rating of specific injuries for enlisted men in the Army and Navy.

Men with disabilities of 100 per cent or less receive such proportions of the sum payable for total disability as correspond to the degree of their disability, in the following category:

Degrees of disability.

100 per cent.—Loss of two or more limbs.

Loss of an arm and an eye.

Loss of a leg and an eye.

Loss of both hands or of all fingers and thumbs.

Loss of both feet.

Loss of a hand and a foot.

Total loss of sight.

Total paralysis.

Lunacy.

Wounds, injuries or disease resulting in disabled man being permanently bedridden.

Wounds of or injuries to internal, thoracic or abdominal organs, involving total permanent disabling effects.

Wounds of or injuries to head or brain involving total permanent disabling effects, or Jacksonian epilepsy.

Very severe facial disfigurement.

Advanced cases of incurable disease.

Degrees of disability.

80 per cent.—Amputation of leg at hip or right arm at shoulder joint.

Severe facial disfigurement.

Total loss of speech.

70 per cent.—Short thigh amputation of leg with pelvic band, or of left arm at shoulder joint, or of right arm above or through elbow.

Total deafness.

60 per cent.—Amputation of leg above knee (other than that mentioned under 70 per cent disablement) or through knee, or of left arm above or through elbow, or of right arm below elbow.

50 per cent.—Amputation of leg below knee (including Symes' and Chopart's amputation), or of left arm below elbow.

Loss of vision of one eye.

40 per cent.—Loss of thumb or of four fingers of right hand.

30 per cent.—Loss of thumb or of four fingers of left hand, or of three fingers of right hand.

20 per cent.—Loss of two fingers of either hand.

In the case of left-handed men, certified to be such, the compensation in respect of the left arm, hand, etc., will be as for a right arm, hand, etc., and vice versa.

In case of injuries not shown in this schedule, and in the case of disease, the pension may be assessed at the degree in the schedule which is held most closely to represent the disablement corresponding to the injury or disease.

SCHEDULE 33.—Great Britain, Army. Classification of ranks of enlisted men for purposes of pensions.

Class I.—Master gunner, third class; schoolmaster (when not a warrant officer); quartermaster corporal major (Household Cavalry); quartermaster sergeant.

Class II.—Squadron corporal major or squadron quartermaster corporal (Household Cavalry); squadron, battery, troop, or company sergeant major; squadron, battery, troop, or company quartermaster sergeant; staff corporal (Household Cavalry) or staff sergeant; color sergeant.

Class III.—Corporal of horse (Household Cavalry); sergeant.

Class IV.—Corporal; bombardier; second corporal.

Class V.—Trooper; private; gunner; driver; sapper; pioneer (Royal Engineers).

SCHEDULE 26.—Great Britain, Army. Weekly separation allowance¹ to wives and children.

[Source: Regulations for the Issue of Army Separation Allowance, Allotments of Pay, and Family Allowance during the Present War, p. 5.]

[Amounts outside of parentheses are in pounds, shillings, and pence; amounts inside parentheses are in dollars.]

Beneficiaries.	Amount of allowance according to rank of soldier.									
	Class 20.		Class 19.		Class 18 and 17.		Class 16.		Class 15.	
	Separation allowance.	Total, including allotment.	Separation allowance.	Total, including allotment.	Separation allowance.	Total, including allotment.	Separation allowance.	Total, including allotment.	Separation allowance.	Total, including allotment.
Wife only.....	£ s. d. 0 9 0 (2.19)	£ s. d. 0 12 6 (3.04)	£ s. d. 0 9 2 (2.23)	£ s. d. 0 15 0 (3.65)	£ s. d. 0 16 8 (4.01)	£ s. d. 0 16 6 (4.01)	£ s. d. 0 16 2 (3.93)	£ s. d. 1 2 0 (5.35)	£ s. d. 0 17 2 (4.18)	£ s. d. 1 3 0 (5.59)
Wife and 1 child.....	0 14 0 (3.41)	0 17 6 (4.26)	0 14 2 (3.45)	1 0 0 (4.86)	0 15 8 (3.81)	1 1 6 (5.23)	1 1 2 (5.15)	1 7 0 (6.57)	1 2 2 (5.39)	1 8 0 (6.81)
Wife and 2 children.....	0 17 6 (4.26)	1 1 0 (5.11)	0 17 8 (4.30)	1 3 6 (5.72)	0 19 2 (4.66)	1 5 0 (6.08)	1 4 8 (6.00)	1 10 6 (7.42)	1 5 8 (6.24)	1 11 6 (7.66)
Wife and 3 children.....	0 19 6 (4.74)	1 3 0 (5.69)	0 19 8 (4.78)	1 5 6 (6.20)	1 1 2 (5.15)	1 7 0 (6.57)	1 6 8 (6.49)	1 12 6 (7.91)	1 7 8 (6.73)	1 13 6 (8.15)
Wife and 4 children.....	1 1 6 (5.23)	1 5 0 (6.08)	1 1 8 (5.27)	1 7 6 (6.69)	1 3 2 (5.64)	1 9 0 (7.05)	1 8 8 (6.97)	1 14 6 (8.39)	1 9 8 (7.22)	1 15 6 (8.64)

¹ For families resident in London postal area, in addition, 3s. 6d. a week (0.85). See also Schedule 27, p. 121.

Each additional child, irrespective of rank of father, 2s. (0.49) a week. Each motherless child, irrespective of rank of father, 5s. (1.22) a week.

SCHEDULE 27.—Great Britain, Army. Special weekly allowance for children under 14 years of age (in addition to ordinary weekly amount of separation allowance for children).¹

[Source: Army Orders, Apr. 1, 1917.]

Number of children under 14 years of age.	Rank of soldier.		Number of children under 14 years of age.	Rank of soldier.	
	Classes 19 and 20.	Classes 17 and 18.		Classes 19 and 20.	Classes 17 and 18.
	s. d.	s. d.		s. d.	s. d.
1.....	2 6(\$0.49)	0 6(\$0.12)	5.....	7 0(\$1.70)	5 6(\$1.34)
2.....	3 6(\$0.85)	2 0(\$0.49)	6.....	8 0(\$1.95)	6 6(\$1.58)
3.....	5 0(\$1.22)	3 6(\$0.85)	7.....	9 0(\$2.19)	7 6(\$1.82)
4.....	6 0(\$1.46)	4 6(\$1.09)	8.....	10 0(\$2.43)	8 6(\$2.07)

¹ This does not apply to classes above 17.

Each additional child, irrespective of rank of father, 1s. (24 cents). Motherless children under 14 years of age receive in addition to the 5s. (\$1.22) payable for each motherless child under 16, allowances as follows: First child, 2s. (49 cents); each additional child, 1s. (24 cents).

SCHEDULE 28.—Great Britain, Navy. Classification of naval and marine ratings for separation allowances.

Sailor.	Marine on ship's books.
Class I. Ordinary seaman.....	Private.
Able seaman.....	Corporal.
Leading seaman, second-class petty officer, and equivalent ratings.	Sergeant and equivalent ranks.
Class II. Petty officer, petty officer first class, and equivalent ratings.	Color sergeant and equivalent ranks.
Class III. Chief petty officer and equivalent ratings; warrant officers, Royal Navy.	Warrant officer, class II, quartermaster sergeant and staff sergeant; Royal Marine gunner.
Class IV.....	Warrant officer, Royal Marines (except Royal Marine gunners).

SCHEDULE 29.—Great Britain, Navy. Weekly separation allowances ¹ to wives and children.

[Source: Navy Separation Allowance, Extracts from Admiralty Orders, p. 1.]

Beneficiaries.	Amounts payable to families of sailors and marines of—							
	Class I.		Class II.		Class III.		Class IV.	
	Separation allowances.	Total, including allotment.	Separation allowances.	Total, including allotment.	Separation allowances.	Total, including allotment.	Separation allowances.	Total, including allotment.
Wife.....	s. d. 6 0 (\$1.46)	s. d. 11 0 (\$2.68)	s. d. 7 0 (\$1.70)	s. d. 12 0 (\$2.92)	s. d. 8 0 (\$1.95)	s. d. 13 0 (\$3.16)	s. d. 9 0 (\$2.19)	s. d. 14 0 (\$3.41)
Wife and 1 child.....	10 0 (\$2.43)	15 0 (\$3.65)	11 0 (\$2.68)	16 0 (\$3.89)	12 0 (\$2.92)	17 0 (\$4.14)	13 0 (\$3.16)	18 0 (\$4.38)
Wife and 2 children..	13 0 (\$3.16)	18 0 (\$4.38)	14 0 (\$3.41)	19 0 (\$4.62)	15 0 (\$3.65)	20 0 (\$4.87)	16 0 (\$3.89)	21 0 (\$5.11)
Wife and 3 children..	15 0 (\$3.65)	20 0 (\$4.87)	16 0 (\$3.89)	21 0 (\$5.11)	17 0 (\$4.14)	22 0 (\$5.35)	18 0 (\$4.38)	23 0 (\$5.60)
Wife and 4 children..	16 0 (\$3.89)	21 0 (\$5.11)	17 0 (\$4.14)	22 0 (\$5.35)	18 0 (\$4.38)	23 0 (\$5.60)	19 0 (\$4.62)	24 0 (\$5.84)

¹ These rates are increased by 3s. 6d. (85 cents) a week for families resident in the London postal area. (See also Schedule 30, p. 122.)

Each subsequent child, irrespective of rank or rating of father, 1s. (24 cents) a week. Each motherless child, irrespective of rank or rating of father, 5s. (\$1.22) a week.

SCHEDULE 30.—*Great Britain, Navy. Special weekly allowance for children under 14 years of age (payable in addition to ordinary amounts of separation allowance for wives and children).*

[Source: Navy Separation Allowance, Extracts from Admiralty Orders, p. 2.]

Number of children under 14.	Weekly amounts payable.							
	Class I.		Class II.		Class III.		Class IV.	
	s.	d.	s.	d.	s.	d.	s.	d.
1.....	2	0 (\$0.49)	1	0 (\$0.24)	1	6 (\$0.36)	0	6 (\$0.12)
2.....	3	6 (\$0.85)	2	6 (\$0.61)	2	6 (\$0.73)	2	0 (\$0.49)
3.....	5	0 (\$1.22)	4	0 (\$0.97)	3	0 (\$0.97)	3	0 (\$0.73)
4.....	6	0 (\$1.46)	5	0 (\$1.22)	4	0 (\$1.22)	4	0 (\$0.97)
5.....	7	0 (\$1.70)	6	0 (\$1.46)	5	0 (\$1.46)	5	0 (\$1.22)
6.....	8	0 (\$1.95)	7	0 (\$1.70)	6	0 (\$1.70)	6	0 (\$1.46)
7.....	9	0 (\$2.19)	8	0 (\$1.95)	7	0 (\$1.95)	7	0 (\$1.70)
8.....	10	0 (\$2.43)	9	0 (\$2.19)	8	0 (\$2.19)	8	0 (\$1.95)

For each subsequent child, irrespective of rank or rating of father, 1s. (24 cents). Motherless children under 14 years of age, irrespective of rank or rating of father, receive in addition to the 5s. (\$1.22) payable for each motherless child allowances as follows: First child, 2s. (49 cents); each additional child, 1s. (24 cents).

SCHEDULE 31.—*Great Britain, Army. Allotment from pay and separation allowance for dependents other than wives and children.*

[Source: Regulations for the Issue of Army Separation Allowance, Allotments from Pay, and Family Allowances during the Present War, p. 54.]

[The amount of separation allowance to dependents other than wife or child is determined for each case. Maximum amounts, varying according to the amount allotted by the soldier, are fixed in the regulations. The minimum allotments required to secure the various maximum allowances are shown in the following schedule.]

Related amounts for class 20.			Related amounts for classes 15 to 19.		
Minimum weekly allotment.	Maximum separation allowance.	Total minimum allotment and maximum separation allowance.	Minimum weekly allotment.	Maximum separation allowance.	Total minimum allotment and maximum separation allowance.
s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
0 7 (\$0.14)	2 5 (\$0.59)	3 0 (\$0.73)	0 7 (\$0.14)	1 11 (\$0.47)	2 6 (\$0.61)
1 2 (\$0.28)	3 10 (\$0.93)	5 0 (\$1.21)	1 2 (\$0.28)	2 10 (\$0.69)	4 0 (\$0.97)
1 9 (\$0.43)	5 9 (\$1.40)	7 6 (\$1.83)	1 9 (\$0.43)	3 9 (\$0.91)	5 6 (\$1.34)
2 4 (\$0.57)	7 2 (\$1.74)	9 6 (\$2.31)	2 4 (\$0.57)	4 8 (\$1.14)	7 0 (\$1.71)
2 11 (\$0.71)	8 7 (\$2.09)	11 6 (\$2.80)	2 11 (\$0.71)	5 7 (\$1.36)	8 6 (\$2.07)
3 6 (\$0.85)	{ Exceeding ¹ 8 7 (\$2.09)	Exceeding ¹ 11 6 (\$2.80)	3 6 (\$0.85)	6 6 (\$1.58)	10 0 (\$2.43)
.....	.....	.....	4 1 (\$0.99)	7 5 (\$1.80)	11 6 (\$2.79)
.....	.....	.....	4 8 (\$1.14)	8 4 (\$2.02)	13 0 (\$3.17)
.....	.....	.....	5 3 (\$1.28)	9 3 (\$2.25)	14 6 (\$3.53)
.....	.....	.....	5 10 (\$1.42)	{ Exceeding ¹ 9 3 (\$2.25)	Exceeding ¹ 14 6 (\$3.53)

¹ If the amount allotted to these dependents is equal to that allotted to a wife (3s. 6d. for class 20, 5s. 10d. for classes 15 to 19) the dependents receive allowances on the same basis as wife and children over 14 years of age, with no fixed maximum.

ARMY AND NAVY DISABILITY PENSIONS.

If a soldier, seaman, or marine is discharged as medically unfit for further service, such unfitness being certified as either attributable to or aggravated by military or naval service in consequence of the present war, and not being due to the serious negligence or mis-

conduct of the discharged man, he is eligible for a disability pension. The maximum payment is for total disability, and grades of disability are arranged on a percentage basis, with proportionate amounts for the several degrees. The amounts vary according to rank, but the pension for the lowest rank of Army and Navy is the same.

If a man's medical unfitness is neither attributable to nor aggravated by military or naval service, and has not been caused by his negligence or misconduct, he may be granted a gratuity or temporary allowance up to a maximum of £150 (\$729.98).

In addition to his own pension, a man receives pensions for children under the age of 16, or over that age if they are mentally or physically infirm, are apprentices receiving a nominal wage, or are attending a secondary or technical school or a university. The pensions for the children also are in proportion to the father's disability.

If a child is maintained in the army or navy or in any institution wholly or mainly supported from public funds, the allowance granted on his account may be reduced "to the extent of the relief."

Disabled Army men of the lowest rank receive no additional pension for service. For men of the Army above the lowest rank, who are eligible for service pensions, two arrangements are made, of which the man can choose the plan more advantageous to him. By the first, he is entitled to the disability pension of his rank, with no addition for service. By the second, he receives the same rate as a man of the lowest rank, and in addition all the pension to which his service entitles him. In the Navy the same disability pension rate is fixed for men of all ratings. In addition to this, and to the usual service pensions to which the man is eligible, a special pension is given in respect of service, which includes periods of service shorter than those recognized by the ordinary regulations.

Instead of disability, prewar earnings may be made the basis of the award of pension, if the man thinks this arrangement more to his advantage. In this case he must prove that the sum of the pension to which his disability entitles him, plus the children's pensions and the average earnings of which he is capable, is less than his prewar earnings, up to a maximum of 75s. (\$18.24) a week.

Various inducements are offered to make a man submit to treatment or to training which is considered valuable for him. One-half of the pension due him and his children may be withheld if he refuses to undergo the treatment prescribed. If he must be away from home during the treatment or training, he may be paid the amount due for total incapacity, any fees, charges or expenses are paid, and in addition the wife and children receive the pension they would be entitled to if the man were dead, but the cost of his maintenance while away from home may be deducted from his pension.

At the termination of a period of training, the man may be paid 5s. (\$1.22) for every week he was undergoing such training. If the treatment does not necessitate his being away from home for more than part of the time, he receives his disability pension, the children are given their pensions, and he receives 10s. (\$2.44) for every week the treatment required his absenting himself for part of the time.

If a man's physical disability has not reached its final condition a pension may be granted suitable to the temporary disability. This shall be reviewed from time to time until a permanent assessment is made.

Permanent pensions once granted are not to be decreased on account of any change in the man's earning capacity, whether resulting from training or other cause.

A temporary allowance of 14s. (\$3.41) a week may be granted a man on his discharge until he can be awarded a pension or gratuity.

Since all men of the Army and Navy must be insured under the national insurance act, they are eligible not only for permanent disability benefits due them under the royal warrant for the pensions of soldiers and order in council for the pension of sailors and marines, but also, if totally disabled, to the sum due under the national insurance act. The latter is diminished by 5s. (\$1.22) weekly if the disabled man is in receipt of a pension. The national insurance act expressly states that insured men of the Army and Navy are not eligible for the medical benefit provided by the act.

SCHEDULE 32.—Great Britain. Comparative rating of specific injuries for enlisted men in the Army and Navy.

Men with disabilities of 100 per cent or less receive such proportions of the sum payable for total disability as correspond to the degree of their disability, in the following category:

Degrees of disability.

100 per cent.—Loss of two or more limbs.

Loss of an arm and an eye.

Loss of a leg and an eye.

Loss of both hands or of all fingers and thumbs.

Loss of both feet.

Loss of a hand and a foot.

Total loss of sight.

Total paralysis.

Lunacy.

Wounds, injuries or disease resulting in disabled man being permanently bedridden.

Wounds of or injuries to internal, thoracic or abdominal organs, involving total permanent disabling effects.

Wounds of or injuries to head or brain involving total permanent disabling effects, or Jacksonian epilepsy.

Very severe facial disfigurement.

Advanced cases of incurable disease.

Degrees of disability.

80 per cent.—Amputation of leg at hip or right arm at shoulder joint.

Severe facial disfigurement.

Total loss of speech.

70 per cent.—Short thigh amputation of leg with pelvic band, or of left arm at shoulder joint, or of right arm above or through elbow.

Total deafness.

60 per cent.—Amputation of leg above knee (other than that mentioned under 70 per cent disablement) or through knee, or of left arm above or through elbow, or of right arm below elbow.

50 per cent.—Amputation of leg below knee (including Symes' and Chopart's amputation), or of left arm below elbow.

Loss of vision of one eye.

40 per cent.—Loss of thumb or of four fingers of right hand.

30 per cent.—Loss of thumb or of four fingers of left hand, or of three fingers of right hand.

20 per cent.—Loss of two fingers of either hand.

In the case of left-handed men, certified to be such, the compensation in respect of the left arm, hand, etc., will be as for a right arm, hand, etc., and vice versa.

In case of injuries not shown in this schedule, and in the case of disease, the pension may be assessed at the degree in the schedule which is held most closely to represent the disablement corresponding to the injury or disease.

SCHEDULE 33.—*Great Britain, Army. Classification of ranks of enlisted men for purposes of pensions.*

Class I.—Master gunner, third class; schoolmaster (when not a warrant officer); quartermaster corporal major (Household Cavalry); quartermaster sergeant.

Class II.—Squadron corporal major or squadron quartermaster corporal (Household Cavalry); squadron, battery, troop, or company sergeant major; squadron, battery, troop, or company quartermaster sergeant; staff corporal (Household Cavalry) or staff sergeant; color sergeant.

Class III.—Corporal of horse (Household Cavalry); sergeant.

Class IV.—Corporal; bombardier; second corporal.

Class V.—Trooper; private; gunner; driver; sapper; pioneer (Royal Engineers).

SCHEDULE 34.—*Great Britain. Pensions to enlisted men for total disability.*

In addition to the amounts given in A, B, and C, if the constant attendance of second person is necessary, 20s. (\$4.87) a week (\$253.24 a year) may be paid.

A.—ARMY AND NAVY. MEN NOT ENTITLED TO SERVICE PENSIONS.

[Data from Royal Warrant for Pensions of Soldiers Disabled and of Families and Dependents of Soldiers Deceased in Consequence of the Present War, together with Order in Council and Regulations for Pensions of British Seamen, their Widows, Relatives, and Dependents, and Royal Warrant for the Pay, Appointment, Promotion, and Noneffective Pay of the Army, 1914, pp. 9, 20.]

[Amounts outside of parentheses are in shillings and pence; amounts inside of parentheses are in dollars.]

Rank of men.		Amount of pension payable.	
Army.	Navy.	Weekly.	Annually.
		s. d.	
Private, etc., Class V	Seamen and marines, all ratings and ranks. ¹	27 6	(347. 85)
Noncommissioned officer, Class IV		(6. 69) 30 0	(379. 61)
Noncommissioned officer, Class III		(7. 30) 32 6	(411. 33)
Noncommissioned officer, Class II		(7. 91) 35 0	(442. 52)
Noncommissioned officer, Class I, warrant officer, Class II.		(8. 51) 37 6	(474. 24)
Warrant officer, Class I		(9. 12) 42 6	(537. 68)
		(10. 34)	

¹ Any seaman or marine, including chief petty officer or petty officer and warrant officer and noncommissioned officer of the Royal Marines except a Royal Marine gunner who has served or been in receipt of naval or marine pay as such during some period of the present war, and including men belonging to the naval and marine reserves, as well as the seaman or marine specially enlisted or deemed to be specially enlisted for the purpose of the present war and transferred to the reserve, if he has served and been in receipt of naval or marine pay.

For disability of less than 100 per cent, amounts are paid proportionate to the degree of disability.

SCHEDULE 34.—*Great Britain. Pensions to enlisted men for total disability—Continued.*

B.—ARMY. MEN ENTITLED TO SERVICE PENSIONS.

[Data from Royal Warrant for the Pensions of Soldiers Disabled and of the Families and Dependents of Soldiers Deceased in Consequence of the Present War, together with Order in Council in Regulations for Pensions of British Seamen and Marines, their Widows, Relatives, and Dependents, p. 9; Royal Warrant for the Pay, Appointment, Promotion, and Noneffective Pay of the Army, 1914, p. 274.]

[Amounts outside of parentheses are in shillings and pence; amounts inside of parentheses are in dollars.]

Rank.	Service pension payable at the end of not less than 14 years' service.			
	Minimum.		Maximum.	
	Weekly.	Annually.	Weekly.	Annually.
	s. d.		s. d.	
Noncommissioned officer, Class IV	8 9	(110. 76)	11 8	(147. 66)
Noncommissioned officer, Class III	(2. 13) 10 6	(132. 60)	(2. 84) 15 9	(199. 16)
Noncommissioned officer, Class II	(2. 55) 12 3	(154. 96)	(3. 83) 17 6	(221. 52)
Noncommissioned officer, Class I	(2. 98) 14 0	(177. 32)	(4. 26) 19 3	(243. 36)
Warrant officer, Class I	(3. 41)		(4. 68)	
	After serving 5 years as warrant officer, after 20 years' qualifying service, 24s. 6d. (5.96) a week (309.92 a year).			

NOTE.—Men entitled to service pensions receive in addition to service pension (shown above) a flat rate for total disability which is the same for all ranks and amounts

to 27s. 6d. (\$6.69) a week (\$347.88 a year). For lesser disabilities the flat rate varies in proportion to the degree of disability. For disability of less than 20 per cent, a gratuity or temporary allowance may be granted, the maximum to be £200 (\$973.30).

SCHEDULE 34.—Great Britain. Pensions to enlisted men for total disability—Continued.

C.—NAVY. MEN ENTITLED TO SERVICE PENSIONS.

[Data from Royal Warrant for the Pensions of Soldiers Disabled and of the Families and Dependents of Soldiers Deceased in Consequence of the Present War, together with Order in Council and Regulations for Pensions of British Seamen and Marines, their Widows, Relatives, and Dependents, pp. 12, 20. Admiralty Navy List, April, 1916, p. 912.]

For men of all ranks totally disabled, 27s. 6d. (\$6.69) a week; different degrees of disability, from 80 per cent downward, proceeding by grades of 10 per cent, in proportion to this amount.

The following amounts are added in respect to service to the amount due in each case for disability:

Length of service.	Weekly amount of pension.
	s. d.
6 and less than 12 years.....	1 0(\$0.24)
12 and less than 18 years.....	2 0(\$0.49)
18 and less than 21 years.....	3 0(\$0.73)
21 and less than 25 years.....	4 0(\$0.97)
25 years and over.....	5 0(\$1.22)

Further pensions in respect of long-time service are payable in addition to both the amounts above.

Twenty-two years continuous service after age of 18, or 22 years of noncontinuous service after age of 20, weekly, 5s. 10d. (\$1.42).

Each good conduct badge, weekly, 3½d. (7 cents).

Good conduct medal, weekly, 7d. (14 cents).

Maximum pension for service, badges, character and medal, weekly, 8s. 2d. (\$1.99).

Petty officers are entitled to all the rates of pension due them for their service as seamen, and in addition, to pensions as officers as follows:

Petty officer, for each year's service as superior petty officer, weekly, 15s. 2d. (\$3.69).

Second class petty officers or rates ranking as leading seamen with over 3 years service as such, each year, weekly, 7s. 7d. (\$1.84).

Chief petty officers, for each year served in that capacity subsequent to the completion of the first period of continuous engagement, weekly, 15s. 2d. (\$3.69).

SCHEDULE 35.—Great Britain, Army and Navy. Weekly pensions for children of disabled enlisted men.

[Data from Royal Warrant for the Pensions of Soldiers Disabled and of the Families and Dependents of Soldiers Deceased in Consequence of the Present War, together with Order in Council and Regulations for Pensions of British Seamen, and Mariners, their Widows, Relatives, and Dependents, pp. 2, 15.]

For first child, 5s. (\$1.22).

For second child, 4s. 2d. (\$1.01).

For third child, 3s. 4d. (81 cents).

For each subsequent child, 2s. 6d. (61 cents).

Children of fathers assessed for other degrees of disability will receive the corresponding proportions of these amounts.

PENSIONS FOR OFFICERS.¹

A commissioned officer holding a permanent or temporary or local commission in the regular or reserve forces or in the territorial force may be pensioned if he retires, relinquishes his commission, or is placed in the territorial force reserves on account of medical unfitness certified as either attributable to or aggravated by military or naval service in consequence of the present war and not due to his serious negligence or misconduct. If the officer holds a permanent commission in the regular forces he may be granted a pension under whichever of the following plans is more advantageous for him: He may receive the retired pay to which he would ordinarily be eligible according to his rank and length of service and in addition a pension which is the same for all ranks but varies with the degree of disability; or he may be paid the same amount to which an officer holding a temporary commission is eligible. Officers not holding permanent commissions receive pensions varying with rank and degree of disability. An officer in receipt of service pension as a soldier, but not holding a permanent commission may be granted either this service pension plus the special disability pension, which is the same for all ranks, or he may be granted a pension to which an officer holding a temporary commission is eligible. A man totally disabled and needing the constant attendance of a second person may receive an additional pension of £78 (\$379.59) a year. An officer who has lost the sight of both eyes as the result of wounds received in action is to be granted not less than £300 (\$1,459.95) a year.

An educational allowance of not more than £50 (\$243.33) a year may be granted in cases of pecuniary need for each child over the age of 9. This allowance ceases if the disability pension ceases, but ordinarily continues as long as the education which the child is receiving meets the approval of the minister of pensions.

Officers, like enlisted men and noncommissioned officers, may receive a pension based on prewar income. An officer who can prove that the sum of retired pay, together with any wound gratuity or pension to which he is entitled, added to average earnings of which he is capable, does not equal his prewar earnings, may receive an amount equal to prewar earnings up to £300 (\$1,459.95) a year, and half of all prewar earnings between £300 (\$1,459.95) and £600 (\$2,919.90). The maximum pension under this scheme would be £450 (\$2,189.93). In case he chooses this plan of pension he forfeits all claim to ordinary service and wounds pension and all educational allowances for children.

¹ These regulations are from the draft of a royal warrant of May 31, 1917, for the pensions of Army officers, and this draft of a royal warrant contains the statement that similar provisions have been made for naval officers.

Special inducements are offered to officers to submit to treatment or training. An officer's pension once permanently fixed may not be reduced because of increased earning capacity resulting from training or other cause. One-half of his pension may be withheld if he declines to submit to treatment prescribed. Regardless of the extent of his disability he may be granted the highest rate of pension while he is receiving training or undergoing treatment in a hospital or sanatorium or other institution. Deductions from the pension may be made, however, to cover the cost of his maintenance at the medical institution. Additional sums may be given to defray expenses incidental to treatment or training.

Disabilities not permanent are pensioned, but only temporarily, until the degree of the permanent disability is established. For disability of not less than 20 per cent a gratuity or temporary allowance up to a maximum of £500 (\$2,433.25) may be given in lieu of pension.

If the officer's medical unfitness is not attributable to or aggravated by military or naval service, and is not the result of his own negligence, he may be granted a gratuity or temporary allowance up to a maximum of £300 (\$1,459.95).

SCHEDULE 36.—*Great Britain, Army. Retired pay to which officers not holding permanent commissions in regular forces are eligible on account of disability.*

[Data from Draft of a Royal Warrant for the Retired Pay of Officers Disabled and for the Pensions of the Families and Relatives of Officers Deceased, and for the Pensions of Nurses Disabled in Consequence of the Present War, p. 10.]

[Amounts outside parentheses are in pounds; amounts within parentheses are in dollars.]

Rank.	Amount payable for total disability.	
	Weekly.	Annually.
Major general.....	(32. 76)	350 (1, 703. 28).
Brigadier general.....	(30. 42)	325 (1, 581. 61)
Colonel.....	(25. 74)	275 (1, 338. 29)
Lieutenant colonel.....	(23. 40)	250 (1, 216. 63)
Major.....	(21. 06)	225 (1, 094. 96)
Captain, lieutenant, second lieutenant.....	(16. 38)	175 (851. 64)

To officers totally disabled and needing the constant attendance of a second person £78 (\$379.59) a year is payable in addition to these amounts.

Other degrees of disability, from 80 per cent, graded by tens, to 20 per cent, are pensioned at rates proportionate to those above.

SCHEDULE 37.—*Great Britain, Army. Retired pay to which officers holding permanent commissions in regular forces are eligible on account of disability.*

[Data from Royal Warrant for the Pay, Appointment, Promotion, and Noneffective Pay of the Army, 1914, p. 146; Draft of a Royal Warrant for the Retired Pay of Officers Disabled and for the Pensions of the Families and Relatives of Officers Deceased and for the Pensions of Nurses Disabled in Consequence of the Present War, p. 10.]

[Amounts outside parentheses are in pounds; amounts within parentheses are in dollars.]

Rank.	Pensions payable for—			
	Wounds received in action.		Wounds received otherwise than in action.	
	Weekly.	Annually.	Weekly.	Annually.
Major general.....	(32. 76)	350 (1, 703. 28)	Special.	Special.
Brigadier general.....	(32. 76)	350 (1, 703. 28)	Special.	Special.
Colonel.....	(28. 08)	300 (1, 459. 95)	(23. 40)	250 (1, 216. 63)
Lieutenant colonel.....	(28. 08)	300 (1, 459. 95)	(23. 40)	250 (1, 216. 63)
Major.....	(18. 72)	200 (973. 30)	(14. 04)	150 (729. 98)
Captain.....	(9. 36)	100 (486. 65)	(7. 02)	75 (364. 99)
Lieutenant and second lieutenant.....	(6. 55)	70 (340. 66)	(4. 68)	50 (243. 33)

NOTE.—Officers entitled to disability pension at the rates above receive in addition to this pension a flat rate for total disability which is the same for all ranks and amounts to £100 (\$486.65) a year, £1 18 s. 5 7/13d. (\$9.36) a week. For lesser disabilities the flat rate varies in proportion to the disability.

To officers totally disabled and requiring the constant attendance of a second person an additional annual pension of £78 (\$379.59) is payable.

An officer in receipt of a service pension as a soldier, but holding no permanent commission in the regular forces, may be paid the flat rate of £100 (\$486.65), which is the same for all ranks, but varies with the degree of disability, and in addition the service pension to which he is entitled. For men of class 5, privates, gunners, etc., this service pension varies from 4 s. 8d. (\$1.14) a week for 14 years of service, to 7s. 7d. (\$1.84) a week for 21 years of service (from \$59.28 to \$95.68 a year). The rates of service pension for noncommissioned officers are given on page 126.

PENSIONS TO DEPENDENTS OF MEN DECEASED IN CONSEQUENCE OF THE WAR.

The most striking feature of the new system for pensions in Great Britain in operation since April 1, 1917, is its provision for all classes of dependents and the alternative offered to widows of pension on a basis of prewar earnings of the husband instead of pension on the ordinary scale.

If a soldier, sailor, or marine is killed while in the performance of military or naval duty, dies as a result of wounds or injuries received in the performance of such duty within seven years of receiving such wounds or injuries, or, dies of disease certified as contracted or commencing while on active service within seven years of his removal from duty on account of such disease, providing his death was not

caused by his serious negligence or misconduct, his widow, children, and other dependents may receive a pension.

If the soldier, sailor, or marine died of wounds, injuries, or disease not attributable to or aggravated by military or naval service, and not due to his serious negligence or misconduct, his widow only may receive a pension. This is temporary, payable during the period of the war and for 12 months afterwards, and amounts to 15s. (\$3.65) a week.

The permanent pension payable to a widow equals one-half the sum her husband would have received had he been disabled in the highest degree. Although an unmarried wife of a soldier, sailor, or marine is eligible to the same separation allowance as a wife during the man's service, her pension in case of his death is smaller than a wife's. If she has before the war been wholly or substantially dependent on the man and has been drawing separation allowance as for a wife, a pension of 10s. (\$2.43) a week can be given her under certain circumstances. It is payable while she has children of the man in her care. After they cease to be in her care she may draw the pension for the period of the war and for 12 months afterwards, or for 12 months after the children leave her charge, whichever is the later date. If subsequently, because of infirmity or age, she becomes incapable of supporting herself, the pension may be renewed for the period of incapacity. A separated wife may be paid the same amount the husband had given her, under court order or otherwise, up to a maximum of 10s. (\$2.43) a week.

Some additional provisions are made for widows. Three pounds (\$14.60) are allowed for funeral expenses for her husband. When a widow reaches the age of 45 her pension is increased 1s. 3d. (30 cents) a week. She is encouraged to submit to training advantageous to her and may receive an allowance of 12s. 6d. (\$3.04) a week for not more than 13 weeks while she is undergoing such training. If she remarries, the pension ceases; but a year's pension may be paid as gratuity.

A widow whose husband was receiving a disability pension of not less than 10s. (\$2.43) a week, but whose death does not entitle her to a pension, may nevertheless be granted a pension of not more than one-half the sum her husband had been receiving. The maximum in any case is the amount she could receive under ordinary rules as the widow of a man of her husband's rank. She must have been living with the man at the time of his death; her pension ceases on remarriage.

If a widow can prove that the pension granted under ordinary circumstances, together with children's pensions, equals less than one-half of the pre-war earnings of her husband, up to a maximum of 75s. (\$18.24) a week, she may be granted, in lieu of ordinary pensions for herself and children, a sum equal to one-half of these pre-war

earnings. Under this arrangement her maximum pension would be 37s. 6d. (\$9.12) a week.

Children of widows, or of unmarried widows, and of separated wives receive a pension equal to the sum they would have received had their fathers been totally incapacitated. Children of separated wives are eligible for the pension even if the father had not contributed to their mother's support. Motherless children receive pensions at somewhat higher rates. If no two of the children are under the care of the same person, this rate is 7s. (\$1.70) each; if two or more are under the care of one person, the rate for the first is 7s. (\$1.70) and for each of the others 6s. (\$1.46). Illegitimate children, maintained under court order, including children whose mothers were not supported by the father, may be paid 5s. (\$1.22) a week each. Children are eligible for pensions up to the age of 16, and beyond that age if they are being educated at a secondary or technical school or a university; or if he is incapable through mental or physical infirmity of earning a living. Children's pensions are continued even if the mother remarries and thus loses her own pension.

In addition to widows and children, parents of the deceased may also receive a pension if they were wholly or partly dependent on him for support. Moreover, if the man was at the commencement of the war an apprentice, who had spent one year at his trade, or had been articled to a profession, or was qualifying for a profession at a school, college, university, or hospital, his parents may receive the pension if they become at any time incapable of self-support by reason of infirmity or age. If the mother of the deceased is widowed during the war and becomes incapable of self-support through infirmity or age, the pension may be granted her without regard to pre-war dependence. The sum payable to one or both parents is the same, and the maximum is 15s. (\$3.65) a week, or, if they were dependent on the deceased for support, the amount of such dependence, whichever amount is less.

Other dependents, eligible for separation allowance, may be granted a temporary gratuity of 5s. (\$1.22) a week, if they are in pecuniary need and incapable of self-support, for the period of incapacity and for 26 weeks afterwards.

Any other dependents may be granted a gratuity equal to a year's pay of the deceased, or an amount equal to a year's separation allowance and allotment, as such allowance and allotment were last paid or payable.

A gratuity of 26 weeks' pension may be granted, on the marriage or remarriage of a female dependent, including a separated wife, but the pension itself ceases.

SCHEDULE 38.—Great Britain. Pensions to dependents of enlisted men deceased in consequence of war.

Data from Royal Warrant for the Pensions of Soldiers Disabled and of the Families and Dependents of Soldiers Deceased, together with Order in Council and Regulations for the Pension of British Seamen and Marines, their Widows, Relatives, and Dependents, pp. 4, 15.]

[Amounts outside of parentheses are in shillings and pence; amounts inside of parentheses are in dollars.]

Amounts of pension payable on behalf of men in lower grades of the Army and Navy, and of Marines.												
Beneficiaries.	Privates, etc., Class V.		Noncommissioned officers, Class IV.		Noncommissioned officers, Class III.		Noncommissioned officers, Class II.		Noncommissioned officers, Class I, warrant officers, Class II.		Warrant officers, Class I.	
	All ratings below second-class petty officer.		Second-class petty officer.		First-class petty officer (O. B.) petty officer (N. B.).		Chief petty officer.					
	All rates below corporal.		Leading rates and corporals.		Sergeants.		Color and staff sergeants.		Warrant officer, Class II.		Warrant officer, Class I.	
	Weekly.	Annually.	Weekly.	Annually.	Weekly.	Annually.	Weekly.	Annually.	Weekly.	Annually.	Weekly.	Annually.
Widow alone	£. d. { 13 9 } { (3. 34) }	{ (173. 08) }	£. d. { 15 0 } { (3. 65) }	{ (189. 80) }	£. d. { 18 3 } { (3. 95) }	{ (205. 40) }	£. d. { 17 6 } { (4. 26) }	{ (221. 52) }	£. d. { 18 9 } { (4. 56) }	{ (237. 12) }	£. d. { 21 3 } { (5. 17) }	{ (268. 84) }
Widow and 1 child.....	{ 18 9 } { (4. 56) }	{ (237. 12) }	{ 20 6 } { (4. 86) }	{ (252. 72) }	{ 21 3 } { (5. 17) }	{ (268. 84) }	{ 22 6 } { (5. 47) }	{ (284. 44) }	{ 23 9 } { (5. 78) }	{ (300. 56) }	{ 26 3 } { (6. 39) }	{ (332. 28) }
Widow and 2 children.....	{ 22 11 } { (5. 57) }	{ (289. 64) }	{ 24 2 } { (5. 88) }	{ (305. 76) }	{ 25 5 } { (6. 18) }	{ (321. 36) }	{ 26 8 } { (6. 49) }	{ (337. 48) }	{ 27 11 } { (6. 79) }	{ (353. 08) }	{ 30 5 } { (7. 49) }	{ (384. 80) }
Widow and 3 children.....	{ 26 3 } { (6. 39) }	{ (332. 28) }	{ 27 6 } { (6. 69) }	{ (347. 88) }	{ 28 9 } { (6. 99) }	{ (363. 48) }	{ 30 0 } { (7. 30) }	{ (379. 00) }	{ 31 3 } { (7. 60) }	{ (395. 20) }	{ 33 6 } { (8. 21) }	{ (426. 92) }

.46).

family or age, 15s. (\$3.65) a week, or amount of prewar

first child, 1s. (\$1.22), second child, 4s. 2d. (\$1.01), third own allowance for the period of the war and 12 months

1 wives. Separated wives not previously supported by

married to or supported by the father, providing there is

partly incapable of self support and in pecuniary need,

DEPENDENTS OF OFFICERS.

To be eligible for a pension a widow must have been married to an officer before the receipt of the wound or injury which caused his death or before his removal from duty on account of the contraction or aggravation of the disease which caused his death. The widow of a permanent regular officer married after the contraction of the disease which caused the man's death may be pensioned, however, if the officer lived at least one year after his marriage or if it can be shown that he was manifestly in good health at the date of his marriage.

The amount of pension is dependent not only upon the rank of the officer, but also upon the cause of his death. A widow of a man killed in action or suffering a violent death due directly to war service or killed in flying service may be paid not only the largest pension, but also a gratuity amounting to from one to four times the ordinary widow's pension for a year.

Legitimate children of officers are eligible for pensions at rates varying with the rank and cause of death of the father. Such pensions are payable to a daughter until she is 21, or marries, and to a son until he is 18, or until he is 21 if he is an apprentice at nominal wages, or is attending a technical school, secondary school, or university. Children in distressed circumstances who are incapable because of mental or physical infirmity of making adequate exertion for their own support may receive pensions beyond the ordinary age limit. The infirmity must have begun in the officer's lifetime and before the child reached the age when pensions ordinarily cease.

Children whose fathers were killed in action, or in flying service, or suffered violent death due wholly to war service may receive, in addition to the pension, a gratuity in amount one-third of the similar gratuity payable to the widow.

Each child over the age of 9 may receive, in addition to all pensions and gratuities an annual education allowance of £35 (\$170.33) as long as the minister of pensions is satisfied with the character of education he is receiving.

Motherless children receive pensions at a somewhat higher rate, £40 (\$194.66) for one child, and £35 (\$170.33) for each subsequent child, if two or more are living together. In addition, motherless children are eligible for education allowance, and also for gratuity if their fathers have been killed in action or in flying service. A motherless child of a second lieutenant who had met his death under these circumstances would thus be eligible for pension at £40 (\$194.66) a year, education allowance of £35 (\$170.33), and gratuity of £33 6s. 8d. (\$162.22). The first year after the father's death the

income would be £108 6s. 8d. (\$527.21), and in subsequent years £75 (\$364.99).

Instead of receiving a pension at the usual rates for herself and her children, a widow may choose prewar income as a basis. If she can prove that her pensions and her children's are less than one-half of her husband's prewar earnings up to £300 (\$1,459.95) plus one-fourth of prewar earnings between £300 (\$1,459.95) and £600 (\$2,919.90), she may be paid a sum equal to one-half of prewar earnings up to a maximum of £450 (\$2,189.95). Her pension under this plan would thus be at the most £225 (\$1,094.97).

An officer's widow not eligible for pension under ordinary circumstances may be granted an amount not less than one nor more than three years' pay of the deceased providing the officer died while in full pay or during the war after removal from full pay because of the injury or disease which caused his death. A widow of an officer on retired pay of not less than £70 (\$340.66) at the time of his death, if his death does not entitle her to pension, may, nevertheless, be paid a pension in amount not more than one-half the deceased officer's retired pay, but in no case more than the sum payable to a widow of a man whose death was caused by illness due to the war.

If a deceased officer has left daughters only and no widow, the daughters may receive the pension payable to widows under the warrant in force before the new regulations came into effect.¹ This pension may be paid in lieu of the ordinary children's pensions, and continues until the last surviving daughter is disqualified by marriage.

A parent or parents of an officer may receive pensions as the minister of pensions may decide, taking into consideration prewar dependence, age, infirmity, and pecuniary need. Sisters and brothers, wholly or partially dependent on an officer, may be pensioned at the same rates and up to the same ages as children of the officer. If sisters and brothers are not eligible for pension under ordinary rules a gratuity of one-half the sum of the widow's pension may nevertheless be granted them. Although pensions to wives and children are granted irrespective of need, pensions to all other dependents are contingent on need having been proved. Pensions to all female dependents cease on marriage or remarriage. If the widow of an officer remarries, and becomes again a widow, her pension may be restored if her pecuniary circumstances justify the restoration, and if she is otherwise eligible for the pension.

¹ Pension payable annually to widow of officers: Field marshal or general officer (including brigadier general, £120 (\$583.98); colonel, £100 (\$486.65); lieutenant colonel, £90 (\$437.99); major, £70 (\$340.66); major, medical corps, £90 (\$437.99); captain, lieutenant, second lieutenant, £50 (\$243.33).

SCHEDULE 39.—Great Britain. Pensions for dependents of officers deceased in consequence of war.

[Data from the Draft of a Royal Warrant for the Retired Pay of Officers Disabled, and for the Pensions of the Families and Relatives of Officers Deceased, and for the Pensions of Nurses Disabled in Consequence of the Present War, p. 10.]

[Figures outside of parentheses in pounds, shillings, and pence; figures in parentheses in dollars.]

Rank.	Pension and gratuity at highest rates. ¹						Pension at ordinary rates. ²			
	Pension.			Gratuity. ³			Widow.		Each child. ⁴	
	Widow.		Each child. ⁴		Annually.	Weekly.	Annually.	Weekly.	Annually.	Weekly.
	Weekly.	Annually.	Weekly.	Annually.						
Field marshal.....	{ (74. 87)	£ 800 (3, 883. 20)	.....	£ 30 (146. 00)	30	.....	£ 3, 500 (17, 032. 75)	.....	£ 600 (2, 919. 90)	.....
General.....	{ (56. 15)	600 (2, 919. 90)	.....	30 (146. 00)	30	.....	3, 000 (14, 599. 50)	.....	450 (2, 189. 93)	.....
Lieutenant general.....	{ (46. 79)	500 (2, 433. 25)	.....	30 (146. 00)	30	.....	2, 000 (9, 733. 00)	.....	375 (1, 824. 94)	.....
Major general.....	{ (37. 43)	400 (1, 946. 60)	.....	30 (146. 00)	30	.....	1, 100 (5, 353. 15)	.....	300 (1, 459. 95)	.....
Brigadier general.....	{ (28. 07)	300 (1, 459. 95)	.....	30 (146. 00)	30	.....	900 (4, 379. 85)	.....	225 (1, 094. 96)	.....
Colonel ⁵	{ (18. 72)	200 (973. 30)	.....	24 (116. 80)	24	.....	600 (2, 919. 90)	.....	150 (729. 98)	.....
Lieutenant colonel ⁶	{ (16. 84)	180 (875. 97)	.....	24 (116. 80)	24	.....	450 (2, 189. 93)	.....	135 (656. 98)	.....
Major.....	{ (13. 10)	140 (681. 31)	.....	24 (116. 80)	24	.....	300 (1, 459. 95)	.....	105 (510. 98)	.....
Captain.....	{ (9. 36)	100 (486. 65)	.....	24 (116. 80)	24	.....	250 (1, 216. 63)	.....	75 (364. 99)	.....
Lieutenant.....	{ (9. 36)	100 (486. 65)	.....	24 (116. 80)	24	.....	140 (681. 31)	.....	75 (364. 99)	.....
Second lieutenant.....	{ (9. 36)	100 (486. 65)	.....	24 (116. 80)	24	.....	100 (486. 65)	.....	75 (364. 99)	.....

¹ Payable if officer is (a) killed in action, or suffers violent death due directly and wholly to war service or is killed or dies of injuries under proper authority, or (b) dies within seven years from wounds or injuries so received or dies from illness which is certified as directly traceable to fatigue, privation, or exposure incident to active operations in the field within seven years after having been first removed from duty on account of such illness, or (c) dies in consequence of injuries received in the performance of military or naval duty otherwise than under (a) within seven years of having been so injured.

² Payable if the officer (a) dies of disease attributable to or aggravated by military service other than under subsection (b) above within seven years after having been first removed from duty on account of such disease or (b) dies of injuries attributable to military service other than under subsections (a) or (c) mentioned in note 1 above, and not through his own negligence or misconduct within seven years after having been first removed from duty on account of such injuries.

³ Payable in addition to pension if the officer is killed in action, or suffers violent death due directly and wholly to war service or is killed or dies of injuries sustained on flying duty or while being carried on duty in aircraft under proper authority or dies within seven years from wounds or injuries so received.

⁴ All children 9 years of age and over may receive an annual educational allowance also of £35 (\$170.33).

⁵ Colonel: A colonel who has been employed as a substantive colonel if a combatant officer, or in the rank of colonel if a medical, veterinary, or departmental officer. ⁶ Including colonel not employed as above.

NOTE.—Motherless children, irrespective of rank of father: First child £40 (\$194.66); subsequent children (if two or more are under the care of one person) £35 (\$170.33). Such children also receive the gratuity according to rank of father if he has died under circumstances mentioned in note 3, above. (See also note 4, above.)

AUSTRALIA.

SEPARATION ALLOWANCES.

Separation allowances for wives and families of men from Australia are on two bases, dependent on whether the man was a British Army reservist or a member of the Australian imperial forces. The rates for British Army reservists do not include allotments from pay which must be made at the rate required of soldiers in Great Britain.¹ No special arrangements are made for separation allowances to dependents other than wives and children, but the rates fixed for wives and children are the maxima for other dependents. A member of the Australian imperial forces is compelled by an order of the governor general in council to allot to his family a portion of his pay.² The minimum is two-fifths of daily rate of pay (exclusive of deferred pay) for the wife, three-fifths of daily rate for a wife and one or more children, and one-fifth for an illegitimate child. The man may allot more if he chooses. If the man's total pay is less than 10s. (\$2.43) a day, a separation allowance also is payable. For a wife this is 1s. 5d. (\$0.34), and for each child 4½d. (9 cents) a day. Separation allowance may be paid if the wife is maintained under court order. If the man makes the required allotment from pay, an unmarried wife also may receive the separation allowance.

Besides sons and daughters, adopted children, children of a widowed sister totally dependent on the member, brothers and sisters under 16, or children of a separated wife, are eligible for separation allowance. Allotments of pay must be made for these children before they are eligible for allowance.

Allowances are continued for all children until they reach the age of 16 years.

A mother, widowed sister, and invalid father whose wife is dead, provided they are not in receipt of invalid, old-age, or war pensions, if they were previously dependent on the soldier may also be granted separation allowances at the rate fixed for a wife.

No separation allowances are payable to wife, child, or other dependent if the man's pay is 10s. (\$2.43) or over a day; and the maximum of separation allowance and of member's pay is fixed at 10s. (\$2.43).

Separation allowances and allotments from pay are continued if the man becomes a prisoner of war.

In case of the death of a member of the imperial forces, separation allowances and allotments of pay continue for two months from the date of notification of death or until a war pension is payable, whichever date is the earlier.

¹ See p. 116.

² Apparently this order includes also commissioned officers.

SCHEDULE 40.—Australia. Australian imperial forces divided into classes on the basis of daily pay subsequent to embarkation.

Class I. Pay, including deferred pay, 6s. (\$1.46) a day. Deferred pay, 1s. (24 cents).

Acting bombardier.	Bugler.
Lance corporal.	Drummer.
Gunner.	Cook.
Sapper.	Batman.
Private.	Stretcher bearer.
Bandsman.	Cleaner and wagonman, mechanical transport.
Collar maker.	Artificer.
Saddler.	Storeman of headquarters.
Wheeler.	Machine-gun company.
Trumpeter.	

Class II. Pay, including deferred pay, 7s. (\$1.70) a day. Deferred pay, 1s. (24 cents).

Shoeing smith and driver (including drivers of motor vehicles other than motor-cycles and those specified in Class III).

Class III. Pay, including deferred pay, 8s. (\$1.94) a day. Deferred pay, 1s. (24 cents).

Mechanical transport:

Workshop fitter.

Turner.

Blacksmith.

Wheeler.

Electrician.

Driver in motor transport units and of all motor lorries.

Mechanic (flying unit and A. M. C. motor lorries).

Class IV. Pay, including deferred pay, 9s. (\$2.19) a day. Deferred pay, 1s. 6d. (36 cents).

Second corporal bombardier.

Class V. Pay, including deferred pay, 10s. (\$2.43) a day.

Corporal.

Armorer corporal.

Band corporal.

Shoeing smith corporal.

Signaling or pay and orderly room corporal.

Class VI. Pay, including deferred pay, 10s. 6d. (\$2.55) a day. Deferred pay, 2s. (\$0.49).

Transport and flying units.

Sergeant.

Pioneer sergeant.

Signaling sergeant.

Transport sergeant.

Armorer sergeant.

Band sergeant.

Sergeant trumpeter.

Class VII. Pay, 11s. 6d. (\$2.80) a day, including deferred pay. Deferred pay, 2s. (49 cents).

Squadron quartermaster sergeant.

Battery quartermaster sergeant.

Troop quartermaster sergeant.

Company quartermaster sergeant.

Orderly room sergeant.

Farrier sergeant.

Collar maker sergeant.

Wheeler sergeant.

Saddler sergeant.

Sergeants of mechanical transport and flying units.

Class VIII. Pay, including deferred pay, 12s. (\$2.92) a day. Deferred pay, 2s. (49 cents).

Staff sergeant major.	Color sergeant.
Squadron sergeant major.	Staff sergeant.
Battery sergeant major.	Armorer staff sergeant.
Troop sergeant major.	Sergeant cook.
Company sergeant major.	Wheeler staff sergeant.
Farrier quartermaster sergeant.	Farrier staff sergeant.
Quartermaster sergeant (flying unit).	Saddler staff sergeant.

Class IX. Pay, including deferred pay, 13s. (\$3.16) a day. Deferred pay, 2s. 6d. (61 cents).

Brigade or regimental sergeant major.
 Quartermaster sergeant.
 Armament artificer.
 Foreman artificer (mechanical transport).
 Foreman mechanic (flying unit).
 Warrant officer.
 Staff quartermaster sergeant.

Class X. Pay, including deferred pay, 14s. (\$3.41) a day. Deferred pay, 2s. 6d. (61 cents).

Staff sergeant (wireless).

Class XI. Adjutant and quartermaster, according to rank.

Class XII. Pay, including deferred pay, 17s. 6d. (\$4.26) a day. Deferred pay, 3s. (73 cents).

Lieutenant.

Second lieutenant.

Class XIII. Pay, including deferred pay, £1 2s. 6d. (\$5.47) a day. Deferred pay, 3s. 6d. (85 cents).

Captain.

Class XIV. Pay, including deferred pay, £1 10s. (\$7.30) a day. Deferred pay, 5s. (\$1.22).

Major.

Class XV. Pay, including deferred pay, £1 17s. 6. (\$9.12) a day. Deferred pay, 7s. 6d. (\$1.82).

Lieutenant colonel.

Class XVI. Pay, including deferred pay, £2 5s. (\$11.07) a day. Deferred pay, 8s. (\$1.95).

Colonel.

Brigadier general.

Class XVII. Pay, £3 5s. 9.4d. (\$16) a day.

Major general.

SCHEDULE 41.—*Australia. Separation allowances for wives and children of members of the Australian imperial forces.*¹

[Amounts outside of parentheses are in pounds, shillings, and pence; amounts inside of parentheses are in dollars.]

Beneficiaries.	Class 1.				Class 2.			
	Weekly allotment from pay.	Weekly separation allowance.	Total.		Weekly allotment from pay.	Weekly separation allowance.	Total.	
			Weekly.	Annually.			Weekly.	Annually.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.	
Wife only	0 14 0 (3.41)	0 9 11 (2.41)	1 3 11 (5.82)	..... (302.64)	0 16 9.6 (4.09)	0 9 11 (2.41)	1 6 8.6 (6.50)	..... (338.00)
Wife and 1 child	1 1 0 (5.11)	0 12 6½ (3.05)	1 13 6½ (8.16)	..... (424.32)	1 5 2.4 (6.13)	0 12 6.5 (3.05)	1 17 8.9 (9.18)	..... (477.36)
Wife and 2 children ..	1 1 0 (5.11)	0 15 2 (3.69)	1 16 2 (8.80)	..... (457.60)	1 5 2.4 (6.13)	0 15 2 (3.69)	2 0 4.4 (9.82)	..... (510.64)
Wife and 3 children ..	1 1 0 (5.11)	0 17 9½ (4.33)	1 18 9½ (9.44)	..... (490.88)	1 5 2.4 (6.13)	0 17 9.5 (4.33)	2 2 11.9 (10.46)	..... (543.92)
Wife and 4 children ² ..	1 1 0 (5.11)	1 0 5 (4.97)	2 1 5 (10.08)	..... (524.16)	1 5 2.4 (6.13)	1 0 5 (4.97)	2 5 7.4 (11.10)	..... (577.20)
Each illegitimate child	0 7 0 (1.70)	0 2 7½ (0.64)	0 9 7½ (2.34)	..... (121.68)	0 8 4.8 (2.04)	0 2 7.5 (0.64)	0 11 0.3 (2.68)	..... (139.36)

Beneficiaries.	Class 3.				Class 4.			
	Weekly allotment from pay.	Weekly separation allowance.	Total.		Weekly allotment from pay.	Weekly separation allowance.	Total.	
			Weekly.	Annually.			Weekly.	Annually.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.	
Wife only	0 19 7.2 (4.77)	0 9 11 (2.41)	1 9 6.2 (7.18)	..... (373.36)	1 1 0 (5.11)	0 7 0 (1.70)	1 8 0 (6.81)	..... (354.12)
Wife and 1 child	1 9 4.8 (7.15)	0 12 6.5 (3.05)	2 1 11.3 (10.20)	..... (530.40)	1 11 6 (7.66)	0 7 0 (1.70)	1 18 6 (9.36)	..... (487.24)
Wife and 2 children ..	1 9 4.8 (7.15)	0 14 0 (3.41)	2 3 4.8 (10.56)	..... (549.12)	1 11 6 (7.66)	0 7 0 (1.70)	1 18 6 (9.36)	..... (487.24)
Wife and 3 children ..	1 9 4.8 (7.15)	0 14 0 (3.41)	2 3 4.8 (10.56)	..... (549.12)	1 11 6 (7.66)	0 7 0 (1.70)	1 18 6 (9.36)	..... (487.24)
Wife and 4 children ² ..	1 9 4.8 (7.15)	0 14 0 (3.41)	2 3 4.8 (10.56)	..... (549.12)	1 11 6 (7.66)	0 7 0 (1.70)	1 18 6 (9.36)	..... (487.24)
Each illegitimate child	0 9 9.6 (2.38)	0 2 7.5 (0.64)	0 12 5.1 (3.02)	..... (157.04)	0 10 6 (2.55)	0 2 7½ (0.64)	0 12 1½ (3.19)	..... (165.80)

¹ Data from Statutory Rules and Orders, Commonwealth of Australia, 1917, No. 49.

² Subsequent children receive allowances as follows: Class 1. Fifth and sixth child, 2s. 7.5d (\$0.64) each; seventh and subsequent, no allowance. Class 2. Fifth child, 7d. (\$0.14); subsequent children, no allowance. Class 3. Subsequent children no allowance. Class 4. Subsequent children no allowance.

SCHEDULE 42.—Australia. Separation allowances for wives and children of British Army reservists.¹

[Source: Regulations for the issue of army separation allowance, allotments of pay and family allowance during the present war, p. 59.]

[Amounts outside of parentheses are in pounds, shillings, and pence. Amounts inside of parentheses are in dollars.]

Beneficiaries.	Allowances payable. ¹							
	Classes 20 and 19. ²		Class 17. ²		Class 16. ²		Class 15. ²	
	Weekly.	Annually.	Weekly.	Annually.	Weekly.	Annually.	Weekly.	Annually.
	£ s. d.		£ s. d.		£ s. d.		£ s. d.	
Wife only.....	0 9 11 (2.41)	(125.32)	0 11 8 (2.84)	(147.68)	0 16 11 (4.11)	(213.72)	0 18 1 (4.40)	(228.00)
Wife and 1 child.....	0 14 11 (3.63)	(188.76)	0 16 8 (4.05)	(210.60)	1 1 11 (5.33)	(277.16)	1 3 1 (5.61)	(291.72)
Wife and 2 children..	0 18 5 (4.48)	(232.96)	1 0 2 (4.91)	(255.32)	1 5 5 (6.18)	(321.36)	1 6 7 (6.47)	(336.44)
Wife and 3 children..	1 0 5 (4.97)	(258.44)	1 2 2 (5.39)	(280.28)	1 7 5 (6.67)	(346.84)	1 8 7 (6.95)	(361.40)
Wife and 4 children..	1 2 5 (5.45)	(283.40)	1 4 2 (5.88)	(305.76)	1 9 5 (7.16)	(372.32)	1 10 7 (7.44)	(386.88)

¹ For allotments from pay see p. 116.

² For classification of rank see p. 119.

Each subsequent child, irrespective of rank of father, 2s. (49 cents) a week.
Each motherless child, 5s. (1.22) a week.

DISABILITY PENSIONS.

Payments to a disabled man in Australia vary with his rank and with the extent of disability. Pensions are payable at the same rate to reservists called for active service who were at the commencement of the war bona fide residents of Australia as to members of the imperial forces.

Wives, including unmarried wives, and children up to the age of 16 are pensioned. Illegitimate children and grandchildren are included as children. If a child over 16 is incapable of earning a living, the pension may be continued at a rate fixed by the commissioner, the maximum not to exceed the rate that would be payable to the widow if the man had died. Other dependents also are eligible for pension of such amounts as the commissioner of pensions or his deputy may fix. The sum of pensions payable to all such dependents must not exceed by more than £2 (\$9.73) a fortnight the amount that would be payable to the widow in case the man had died. Pensions to wife, child, father, mother, grandfather, or grandmother are issuable whether or not the beneficiary is capable of earning a living. Pensions to other dependents cease after two years if the beneficiary is capable of self-support.

Rates for partial incapacity are fixed by the commissioner of pensions or his deputy. A lump sum payment may, at the discretion of the authorities, be substituted for a pension if the disability is assessed

at 30 per cent or less. In assessing pensions, any other pension (under imperial or under State act) to which a member of the forces or his dependent is entitled by reason of his incapacity resulting from the war shall be taken into account.

SCHEDULE 43.—Australia. Category of disabilities.

Maximum rate:

- Loss of both legs.
- Loss of both feet.
- Loss of both arms.
- Loss of both hands.
- Loss of arm and leg.
- Loss of hand and foot.
- Loss of both eyes.
- Loss of one eye, together with loss of leg, foot, hand, or arm.

Maximum rate for six months, thereafter three-fourths of the maximum rate:

- Loss of leg or foot.
- Loss of hand or arm.

Half the maximum rate:

- Loss of one eye.

A leg, foot, hand, arm, or eye shall be deemed to be lost if it is rendered permanently and wholly useless.

SCHEDULE 44.—Australia. Pensions for disability.

[Source: Acts of the Parliament of the Commonwealth of Australia, 1916, p. 131 (War Pensions Act, 1914-1916, first schedule).]

[Amounts outside of parentheses are in pounds, shillings and pence; amounts inside of parentheses are in dollars.]

Rate of pay of the members of the forces per day.	Amounts of pension payable upon total incapacity.		Rate of pay of the members of the forces per day.	Amounts of pension payable upon total incapacity.	
	Fort-nightly.	Annually.		Fort-nightly.	Annually.
£ s. d. 0 6 0 (1.46)	£ s. d. 3 0 0 (14.59)	(379.34)	£ s. d. 0 13 0 (3.16)	£ s. d. 3 14 0 (18.00)	(468.00)
0 7 0 (1.70)	3 2 0 (15.08)	(392.08)	0 17 6 (4.26)	4 0 0 (19.46)	(505.96)
0 9 0 (2.19)	3 6 0 (16.05)	(417.30)	1 2 6 (5.47)	4 5 0 (20.68)	(537.68)
0 10 0 (2.43)	3 8 0 (16.54)	(430.04)	1 10 0 (7.30)	4 15 0 (23.11)	(600.86)
0 10 6 (2.55)	3 9 0 (16.78)	(436.28)	1 17 6 (9.12)	5 5 0 (25.54)	(664.04)
0 11 6 (2.80)	3 11 0 (17.27)	(449.02)	2 5 0 (10.95)	5 15 0 (27.97)	(727.22)
0 12 0 (2.92)	3 12 0 (17.51)	(455.26)	2 10 0 (12.16)	6 0 0 (29.19)	(758.94)
			and upward		

A man so disabled as to need the constant attendance of another person, may receive in addition to his disability pension £1 (\$4.87) per fortnight if he is unmarried or if his wife is dead or a permanent invalid, in case he has not himself the means to pay an attendant.

The wife of a disabled man receives in addition one-half of the amount payable to the disabled man.

Children of a totally incapacitated member of the forces receive fortnightly pensions as follows: First child, 20s. (\$4.87) per fortnight (\$126.53 a year); second child, 15s. (\$3.65) per fortnight (\$94.90 a year); third and subsequent children, 10s. (\$2.43) fortnightly (\$63.26 a year).

Other dependents may receive such sums as the commissioner of pensions or his deputy may assess. In the aggregate, they may not exceed the amount of pension payable to the widow on the death of a member, plus £2 (\$9.73) per fortnight.

No one dependent of the member may receive more than an amount equal to the widow's pension.

For partial incapacity, the rates assessed are determined by the commissioner of pensions or his deputy, who must take into consideration the nature and probable duration of the incapacity. For incapacity of 30 per cent or less, a lump sum payment may be made.

PENSIONS TO DEPENDENTS OF MEN DECEASED IN CONSEQUENCE OF WAR.

Wives and unmarried wives who were wholly or partly supported by the deceased are eligible for pensions upon the death of a member of the forces. Pensions at the same rates are payable to dependents of men of the imperial forces and to reservists resident in Australia at the commencement of hostilities. The rates vary with the pay of the deceased.

Children, legitimate and illegitimate (providing the illegitimate child is born before the occurrence of the event resulting in the man's death, or within nine months after that event) are eligible for pension, as are also grandchildren and illegitimate grandchildren if they were dependent upon the soldier within 12 months prior to his enlistment. Orphan children are granted a larger pension than those whose mothers are living. Payments to children ordinarily cease when the child is 16 years of age, or two years after the date of the commencement of pension, whichever is later. A child of 16 unable to earn a living may be granted a pension by the commissioner, in amount not exceeding the widow's rate of pension.

Other members of the deceased man's family, dependent on his earnings at any time within 12 months prior to his enlistment—parents who, though not dependent on the man prior to his death, become subsequently without adequate means of support, and illegitimate parents or grandparents—also may be awarded a pension. In the aggregate such pensions to dependents must not exceed the widow's pension plus £2 (\$9.73) a fortnight. In fixing pensions the commissioner must take into account any other pensions (under Imperial or under State act) to which the dependents of the deceased man are entitled by reason of his death in connection with the war.

Pensions payable to widow, mother, and female dependents will be continued for two years only beyond the date of their marriage or remarriage.

All payments are made fortnightly.

SCHEDULE 45 —Australia. Pensions to dependents of men deceased in consequence of war.

[Source: Acts of the Parliament of the Commonwealth of Australia, 1916, p. 131. War Pensions Act, 1914-1916, first schedule.]

[Amounts outside of parentheses are in pounds, shillings, and pence; amounts inside of parentheses are in dollars.]

Daily rate of pay of the mem- ber of the forces.	Pension payable to widow on death of member.		Daily rate of pay of the mem- ber of the forces.	Pension payable to widow on death of member.	
	Fort- nightly.	Annually.		Fort- nightly.	Annually.
£ s. d. 0 6 0 (1.46)	£ s. d. 2 0 0 (9.73)	(252.98)	£ s. d. 0 17 6 (4.26)	£ s. d. 3 10 0 (17.03)	(442.78)
0 7 0 (1.70)	2 3 0 (10.46)	(271.96)	1 2 6 (5.47)	3 17 6 (18.85)	(490.10)
0 9 0 (2.19)	2 9 0 (11.92)	(309.92)	1 10 0 (7.30)	4 9 0 (21.65)	(562.90)
0 10 0 (2.43)	2 12 3 (12.71)	(330.46)	1 17 6 (9.12)	5 0 9 (24.51)	(637.26)
0 10 6 (2.55)	2 13 9 (13.07)	(339.82)	2 5 0 (10.95)	5 12 3 (27.30)	(709.80)
0 11 6 (2.80)	2 16 0 (13.62)	(354.12)	2 10 0 (12.16)	6 0 0 (29.19)	(758.94)
0 12 0 (2.92)	2 17 3 (13.93)	(362.18)	and up- ward.		
0 13 0 (3.16)	2 19 6 (14.47)	(376.22)			

The widowed mother of an unmarried son receives the same amount as the widow. To each child pensions are payable at the following rate: First child, 20s. (4.87) a fortnight (126.53 a year); second child, 15s. (3.65) a fortnight (94.90 a year); third and each subsequent child, 10s. (2.43) a fortnight (63.26 a year.)

The maximum rate of payment for a child both of whose parents are dead is as follows: Child up to 10 years of age, 20s. (4.87) per fortnight; child 10 to 14 years of age, 25s. (6.09) per fortnight; child 14 to 16 years of age, 30s. (7.31) per fortnight.

For other dependents of the deceased, pensions may be set by the commissioner of pensions or his deputy; in the aggregate they must not exceed the amount of pension payable to the widow, plus £2 (9.73) per fortnight. No one dependent may receive a sum greater than the widow's pension.

NEW ZEALAND.

SEPARATION ALLOWANCES.

For British Army reservists special rates of separation allowance are fixed; these are exclusive of allotted pay,¹ and are approximately the rates fixed for reservists resident in other colonies.

For the New Zealand contingent a flat rate of required allotment for families was fixed in November, 1914. This was 2s. (49 cents) a day. In case of need the deferred pay of the man, 1s. (24 cents) a day, could be added to the allotment.² The weekly income of the family would thus be 21s. (\$5.11) per week. No provision for separation allowance was made at the time, and no later information on the point is available.

¹ Required allotments from pay are at the same rate as those fixed for soldiers in Great Britain. See p. 116.

² The total pay of a private soldier (lowest rank) is 5s. (\$1.22) a day.

SCHEDULE 46.—*New Zealand. Separation allowances for wives and children of British Army reservists.*

[Data from Regulations for the Issue of Army Separation Allowance, Allotments of Pay and Family Allowance During the Present War, p. 61, and Papers relating to Scales of Pensions and Allowances of Officers and Men of the Oversea Contingents and their Dependents, p. 7.]

[Amounts outside of parentheses are in shillings and pence. Amounts inside of parentheses are in dollars.]

Beneficiaries.	Classes 20 and 19. ¹		Class 17. ¹		Class 16. ¹		Class 15. ¹	
	Allowance payable—		Allowance payable—		Allowance payable—		Allowance payable—	
	Weekly.	An-nually.	Weekly.	An-nually.	Weekly.	An-nually.	Weekly.	An-nually.
	s. d.		s. d.		s. d.		s. d.	
Wife.....	9 4 (2. 27)	(118. 04)	11 1 (2. 70)	(140. 40)	16 4 (3. 97)	(206. 44)	17 6 (4. 26)	- (221. 52)
Wife and 1 child.....	14 4 (3. 49)	(181. 48)	16 1 (3. 91)	(203. 32)	21 4 (5. 19)	(269. 88)	22 6 (5. 47)	(284. 44)
Wife and 2 children..	17 10 (4. 34)	(225. 68)	19 7 (4. 76)	(247. 52)	24 10 (6. 04)	(314. 08)	26 0 (6. 32)	(328. 64)
Wife and 3 children...	19 10 (4. 82)	(250. 64)	21 7 (5. 25)	(273. 00)	26 10 (6. 53)	(339. 56)	28 0 (6. 81)	(354. 12)
Wife and 4 children..	21 10 (5. 31)	(276. 12)	23 7 (5. 74)	(298. 48)	28 10 (7. 01)	(364. 52)	30 0 (7. 30)	(379. 60)

¹ For classification of rank see p. 119.

Each additional child irrespective of rank of father 2s. (49 cents).
Each motherless child, 5s. (1.22).

PENSIONS FOR DISABLED MEN AND FOR THE DEPENDENTS OF MEN DECEASED IN CONSEQUENCE OF WAR.

The same law fixes the amounts and defines the beneficiaries for both disability pension and pensions to dependents of men deceased in consequence of war.

Beneficiaries may be a wife married before the man's death or disablement, or a woman married within 12 months after the date of the man's discharge. In the latter case there must have existed a binding contract to marry before the man left New Zealand, or the woman must have borne a child to the member of the forces, not only before the marriage but before the date of the departure of the man from New Zealand or within 10 months after his departure. The child must have been living at the date of marriage.

Children, including sons, daughters, stepsons, stepdaughters, illegitimate children or children legally adopted before the member joined the forces, are eligible for pension to the age of 16, and at the discretion of the authorities may receive it up to the age of 17. For infirm children the pension may be continued.

A dependent other than wife or child may be a father, mother, stepfather, stepmother, grandfather, grandmother, grandchild, brother, sister, half brother, half sister, or mother-in-law. Except in the case of wife or child, a dependent must have been supported

wholly or partly by the man during the 12 months immediately preceding the member's joining the forces. If wife or children are entitled to pension, other dependents may not receive more than three-fourths of the amount payable to a wife. If there is no wife or child, any other dependent may receive the full amount due to a wife, but not more than the amount of the prewar dependence.

Parents of a deceased member of the forces may be pensioned at any time regardless of prewar dependence, if they are without adequate means of support. The mother can not be less than 50 and the father not less than 55. A widowed mother, solely dependent for support on the deceased member of the forces receives a pension of not less than the pension payable to a wife. In this case the rule setting the maximum for dependents is waived.

In determining pension payable to a member of the forces or to his wife or widow, no account is taken of property or income from other sources. But pensions to other dependents take into consideration property and income from all sources. If any dependent is in receipt of a war allowance from any other source, the pension is proportionately decreased.

Disability pensions date from the termination of appointment or the date of discharge, pensions to dependents of deceased members from the date of death or date reported missing.

Applications for disability pensions must be made within 6 months of the date of the determination of appointment or the discharge; applications by the dependents of a deceased member of the forces must be made within 6 months after the notification of a death. The wife and children may receive a pension payable on report of the death of a member of the forces occurring at any time within 7 years of the receipt of any wound or injury or the commencement of disease.

A widow on remarriage loses her pension, but she may be granted in lump sum or allotments a gratuity equal to 2 years' pension.

Pensions are payable in monthly installments at the post office nearest to the residence of the pensioner.

SCHEDULE 47.—New Zealand. Classification of ranks for pension purposes.¹

Class 1:

Private.
Bombardier.
Lance corporal.
Trooper.
Gunner.

Class 1—Continued.

Driver.
Sapper.
Trumpeter.
Bugler.
Able seaman, and equivalent ratings.

¹ For classification of ranks of British Army reservists for separation allowance, see "Great Britain, Classification of rank for separation allowances," p. 119.

Class 2:

Corporal.

Farrier. Shoeing smith, saddler, or fitter (if bombardier, lance corporal, gunner, or private).

Lance sergeant (not paid as such).

Leading seaman and equivalent ratings.

Class 3:

Sergeant.

Farrier corporal.

Shoeing smith corporal.

Saddler corporal.

Corporal fitter.

Farrier sergeant.

Class 3—Continued.

Saddler sergeant.

Armorer sergeant.

Sergeant fitter.

Lance sergeant (paid as such).

Petty officer and equivalent ratings.

Class 4:

Squadron, battery, or company sergeant major.

Quartermaster sergeant.

Color sergeant.

Staff sergeant.

Pay clerk.

Chief petty officer and equivalent ratings.

Class 5:

Regimental sergeant major.

Regimental quartermaster sergeant.

Warrant officer and equivalent ranks (Navy).

Class 6:

Second lieutenant (Army).

Commissioned warrant officer and equivalent ranks.

Sublieutenant and equivalent rank (Navy).

Class 7:

Captain (Army).

Lieutenant under eight years' seniority, and equivalent ranks (Navy).

Class 8:

Major (Army).

Lieutenant of eight years' seniority, and equivalent ranks (Navy).

Class 9:

Lieutenant colonel.

Captain under three years' seniority, and equivalent ranks (Navy).

Class 10:

Colonel.

Captain of three years' seniority and equivalent ranks (Navy).

Commander and equivalent ranks (Navy).

Class 11:

Brigadier general.

Major general.

Commodores, first and second class.

Rear admirals and other equivalent ranks.

SCHEDULE 48.—*New Zealand. Pensions for disabled men and their dependents.*¹

[Data from Statutes of New Zealand, 1915, p. 35 (6 Geo. 5, No. 16), as amended Statutes of New Zealand, 1916, p. 5 (7 Geo. 5, No. 1, sec. 11) (1)].

[Amounts inside of parenthesis are in dollars; amounts outside of parenthesis are in pounds, shillings, and pence.]

Rank of man.	Pension payable to the man.		Pension payable to his wife.		Pension payable for each child.	
	Weekly.	Annually.	Weekly.	Annually.	Weekly.	Annually.
	£ s. d.		£ s. d.		s. d.	
Class 1.....	1 15 0 (8.51)	(442.52)	0 12 6 (3.04)	(158.08)	7 6 (1.82)	(94.64)
Class 2.....	1 15 0 (8.51)	(442.52)	0 13 0 (3.16)	(164.32)	7 6 (1.82)	(94.64)
Class 3.....	1 15 0 (8.51)	(442.52)	0 13 6 (3.28)	(170.56)	7 6 (1.82)	(94.64)
Class 4.....	1 15 0 (8.51)	(442.52)	0 14 6 (3.53)	(183.56)	7 6 (1.82)	(94.64)
Class 5.....	1 15 0 (8.51)	(442.52)	0 15 0 (3.65)	(189.80)	7 6 (1.82)	(94.64)
Class 6.....	1 17 6 (9.12)	(474.24)	0 17 6 (4.26)	(221.52)	7 6 (1.82)	(94.64)
Class 7.....	2 0 0 (9.73)	(505.96)	1 0 0 (4.87)	(253.24)	7 6 (1.82)	(94.64)
Class 8.....	2 7 0 (11.43)	(594.36)	1 3 6 (5.72)	(297.44)	7 6 (1.82)	(94.64)
Class 9.....	2 16 0 (13.62)	(708.24)	1 8 0 (6.81)	(354.12)	7 6 (1.82)	(94.64)
Class 10.....	2 18 0 (14.11)	(733.72)	1 9 0 (7.05)	(366.60)	7 6 (1.82)	(94.64)
Class 11.....	3 0 0 (14.59)	(758.68)	1 10 0 (7.30)	(379.60)	7 6 (1.82)	(94.64)

¹ Amounts stated are granted for total disability; for partial disability, the rates are arranged by the War Pension Board subject to the approval of the Minister of Defense.

For a man totally disabled 10s. (\$2.43) a week, in addition to pension, may be paid if the services of an attendant are indispensable and the member has not means to pay for attendant.

If there is no wife, another dependent may receive wife's share up to the extent of prewar dependence.

SCHEDULE 49.—*New Zealand. Pensions for dependents of men deceased in consequence of war.*

[Data from Statutes of New Zealand, 1915, p. 35, 6 Geo. 5, No. 16.]

[Amounts outside of parentheses are in pounds, shillings, and pence; amounts inside of parentheses are in dollars.]

Rank of man.	Amount payable to the wife.		Rank of man.	Amount payable to the wife.	
	Weekly.	Annually.		Weekly.	Annually.
	£ s. d.			£ s. d.	
Class 1.....	1 5 0 (6.08)	(316.16)	Class 7.....	2 5 0 (10.95)	(569.40)
Class 2.....	1 6 0 (6.32)	(328.64)	Class 8.....	2 12 0 (12.65)	(657.80)
Class 3.....	1 7 0 (6.57)	(341.64)	Class 9.....	3 1 0 (14.84)	(771.68)
Class 4.....	1 9 0 (7.05)	(366.60)	Class 10.....	3 3 0 (15.32)	(796.64)
Class 5.....	1 10 0 (7.30)	(379.60)	Class 11.....	3 5 0 (15.81)	(822.12)
Class 6.....	2 0 0 (9.73)	(505.96)			

Each child, irrespective of rank of father, 7s. 6d. (\$1.82) a week.

Motherless children, 10s. (\$2.43) a week.

Mother receives the wife's allowance, if she is a widow and the member was her sole support.

If there was no wife or child, other dependents may receive wife's pension, or the amount of the prewar dependence, whichever is less.

Illegitimate children receive pensions as legitimate children.

UNION OF SOUTH AFRICA.

The Union of South Africa has made provisions for pensioning disabled men and the dependents of deceased men, but all information available seems to indicate that these provisions are less complete than those of the other colonies of Great Britain. The only available provisions for separation allowances were those made for reservists. The rates, higher than those in Great Britain, are exclusive of allotment of soldier's pay¹ and represent the maximums for all dependents. No information as to required allotments or as to the separation allowances for the South Africa contingent was available.

In 1916 the provisions for pensions for members of the defense force, other than the permanent force, were extended to include all persons enlisted for active service during the present war. There is apparently no graded scale of disability. The maximum pension in case of permanent incapacity, total or partial, is fixed at £100 (\$486.65) annually or 3 years' pay of rank. Civil servants, eligible to disablement pensions as such may receive such pensions in lieu of the military pension if this is more advantageous to them.² In case of the death of a member of the force, his widow without regard to rank is entitled to a pension of £70 (\$340.66) a year. This ceases on remarriage. Sons up to the age of 18, daughters up to the age of 21 or until marriage, are eligible for pension, as are also aged or infirm parents or a female relative wholly dependent on the deceased at the time of his death. Issue of pension to children, parents, and female dependents, but not to widows, is at the discretion of the Government.

¹ The required allotment is the same as for soldiers in Great Britain. See p. 116.

² Statutes of the Union of South Africa, 1912, p. 274, act No. 13 of 1912, sec. 118, as amended by act No. 29 of 1916 (Statutes of Union of South Africa, 1916, p. 458).

SCHEDULE 50.—*Union of South Africa. Separation allowances to wives and children of British Army reservists.*

[Data from Regulations for the Issue of Separation Allowance, Allotments of Pay and Family Allowance during the Present War, page 60.]

[Amounts outside of parentheses are in shillings and pence; amounts inside of parentheses are in dollars.]

Beneficiaries.	Class 20. ¹		Class 19. ¹		Class 17. ¹		Class 16. ¹		Class 15. ¹	
	Allowance payable		Allowance payable		Allowance payable		Allowance payable		Allowance payable	
	Weekly	Annually.	Weekly	Annually.	Weekly	Annually.	Weekly	Annually.	Weekly	Annually.
Wife.....	s. d. 14 7 (3. 55)	(184.60)	s. d. 14 7 (3. 55)	(184.60)	s. d. 16 4 (3. 97)	(206.44)	s. d. 21 7 (5. 25)	(273.00)	s. d. 22 9 (5. 53)	(287.56)
Wife and 1 child....	19 10 (4. 82)	(250.64)	20 5 (4. 97)	(258.44)	22 2 (5. 39)	(280.28)	27 5 (6. 67)	(346.84)	28 7 (6. 95)	(361.40)
Wife and 2 children..	25 1 (6. 10)	(317.20)	26 3 (6. 39)	(332.28)	28 0 (6. 81)	(354.12)	33 3 (8. 09)	(420.68)	34 5 (8. 37)	(435.24)
Wife and 3 children..	30 4 (7. 38)	(383.76)	32 1 (7. 80)	(405.60)	33 10 (8. 23)	(427.96)	39 1 (9. 51)	(494.52)	40 3 (9. 79)	(509.08)
Wife and 4 children..	35 0 (8. 51)	(442.52)	36 9 (8. 94)	(464.88)	38 6 (9. 36)	(486.72)	43 9 (10. 64)	(553.28)	44 11 (10. 93)	(568.36)

¹ For classification of rank see p. 119.

Each subsequent child, irrespective of rank of father, 4s. 8d. (\$1.14) a week.
Each motherless child, irrespective of rank of father, 5s. 3d. (\$1.28) a week.

SCHEDULE 51.—*Union of South Africa. Pensions for dependents of men deceased in consequence of war.*¹

[Amounts outside of parentheses are in pounds, shillings, and pence; amounts inside of parentheses are in dollars.]

Beneficiaries.	Amounts payable.	
	Weekly.	Annually.
Widow.....	£ s. d. 1 6 11 1/2 (6. 55)	£ 70 (340. 66)
Each child.....	0 6 11 1/2 (1. 50)	16 (77. 86)
Aged or infirm parents, or female relatives wholly dependent on deceased.....	19 2 1/2 (4. 68)	50 (243. 33)

¹ Statutes of the Union of South Africa, 1912, pp. 276, 290, Act. No. 13 of 1912, sec. 118, and Schedule VI, as amended by statutes of the Union of South Africa, 1916, p. 458, act No. 29 of 1916.

PRINCIPAL SOURCES OF INFORMATION CONCERNING THE PENSION SYSTEMS OF GREAT BRITAIN AND COLONIES OF GREAT BRITAIN.

Great Britain: Regulations for the issue of army separation allowance, allotments of pay and family allowance during the present war. London, H. M. Stationery Office, 1916.

Great Britain: Army Orders, April, 1917. London, H. M. Stationery Office, 1917.

Great Britain, Military Service (Civil Liabilities) Committee: Regulations made by the military service (civil liabilities) committee with

the concurrence of the Lord Commissioner of His Majesty's Treasury. London, H. M. Stationery Office, 1916. (Cd. 8249.)

Great Britain: The Navy List for April, 1916, corrected to the 18th of March, 1916. London, H. M. Stationery Office, 1916.

Great Britain, War Pensions, Etc., Statutory Committee: Draft regulations (pt. 1) for grants to supplement pensions, grants, and separation allowances payable out of public funds and for other grants and allowances, made by the statutory committee of the Royal Patriotic Fund Corporation constituted under the Naval and Military War Pensions, etc., Act, 1915. London, H. M. Stationery Office, 1916. (Cd. 8316.)

Papers relating to scales of pensions and allowances of officers and men of the oversea contingents and their dependents. London, H. M. Stationery Office, 1915. (Cd. 7793.)

Navy separation allowance. (Extracts from Admiralty Orders.)

Great Britain, Ministry of Pensions: Royal warrant for the pensions of soldiers disabled and of the families and dependents of soldiers deceased in consequence of the present war together with order in council and regulations for pensions of British seamen and marines, their widows, relatives, and dependents. London, H. M. Stationery Office, 1917. (House of Commons, 64).

Statutes of New Zealand, 1915 and 1916.

Statutes of the Union of South Africa, 1912 and 1916.

Statutory rules and orders, Commonwealth of Australia, 1917, No. 49.

Acts of the Parliament of the Commonwealth of Australia, 1916.

Royal warrant for the pay, appointment, promotion, and non-effective pay of the Army. London, H. M. Stationery Office, 1914.

The draft of a royal warrant for the retired pay of officers disabled and for the pensions of the families and relatives of officers deceased, and for the pensions of nurses disabled in consequence of the present war. London, H. M. Stationery Office, 1917. (Cd. 8631.)

ITALY.¹

SEPARATION ALLOWANCES.

The system of Government separation allowances to the families of soldiers in existence in Italy before 1914 proved insufficient to meet the extraordinary demands of the European conflict. The amounts allowed have been twice raised by the Government since the outbreak of the war, and have been supplemented by various subsidies, both public and private. The last increase in the scale of allowances was made in April of 1917. The present status is shown in the following schedule.²

¹ The Italian material was prepared by Miss Mary D. Hopkins.

² Decree of the lieutenant general, Apr. 23, 1917, No. 662, *Gazzetta Ufficiale*, Apr. 30, 1917.

SCHEDULE 52.—*Italy. Separation allowances.*

[Amounts outside of parentheses are in lire and fractions of a lire; amounts inside of parentheses are in fractions of a dollar.]

Ascendants and collateral relatives do not receive the allowance if there is a wife or children. In such cases the wife or children or both receive it. When several brothers are called to the colors allowances to parents, brothers, and sisters can be extended in behalf of only one.

All indigent families of soldiers who are deprived of support by the call to arms or retention under arms of their breadwinners may be admitted to the separation allowance.

The allowance must be asked for not by the soldier but by the relatives interested. Such persons will submit their request to the syndic (sindaco) of the commune where they reside, and the syndic on receiving it will make an investigation to ascertain the character and economic condition of the family, so as to make sure that the soldier in question has been actually recalled to the colors or retained in service, and that the family is not already drawing the allowance in another commune. As soon as possible the communal committee is called together to decide upon the merits of the claim. This committee consists of the syndic, as chairman, the local commandant of the Royal Carbineers, and the president of the local organized charities. If decision must be given on the question of "incapacity for work" the municipal physician must be called in. In the event of the committee's decision being favorable, the syndic is required to provide for the immediate payment of the allowance.¹

The interest of the authorities in a rapid and effective administration of the system is indicated in many ways. In populous communes, the syndic, to expedite grants, may appoint more than one committee. The commandants of the military districts in a mani-

¹ Circular No. 351, May 20, 1915, *Giornale Militare Ufficiale*, 1915.

festò of the 22d of May, 1915, say that the reason for direct application of the families to the syndic is "in order to secure the greatest possible speed in the service."

Payment of allowances is made each Monday for the week just past, and every fifteen days the syndic must report to the commandant of the military district the amounts of allowances paid. Funds for the payment of the allowances are obtained by an appropriation in the budget.

In addition to the daily separation allowances described, monthly allowances are paid as a war indemnity to various classes of citizens. Civil employees of the State, for example, may receive 15 lire (\$2.90) or 12 lire (\$2.32) monthly, according as their yearly salaries are not above 1,500 lire (\$289.50) or not above 3,000 lire (\$579), respectively. Subaltern officers, married with at least one child or widowers with two or more children, may receive the 15 lire (\$2.90) a month also.¹

Besides the State allowances subsidies are granted in especially needy cases from funds subscribed privately and administered by the military authorities. A circular of the Minister of the Marine² speaks with appreciation of the large subscriptions for this purpose made by the personnel of the Navy in answer to his previous appeal and emphasizes that individual care should be used in their distribution.

The State has made wide provision for the continuance of salaries to its civil employees recalled to arms and has even, by a decree of May 1, 1916, required that private firms shall, under certain conditions, pay indemnities to their employees amounting, as a maximum, to one-half their salary.³

Another source of assistance from the State to the more needy families of soldiers is the compulsory State maternity insurance for wage-earning women working in factories or engaged in other occupations to which the labor law for women and children applies. The benefits amount to 40 lire (\$7.72) at the time of childbirth and are paid to the amount of 70 per cent from the fund created by the contributions of employer and employee, and to the amount of 30 per cent by the State.⁴

¹ Decree of the Lieutenant general, Oct. 29, 1916, No. 1499, *Gazzetta Ufficiale*, Nov. 13, 1916, and Act No. 886, *Giornale Ufficiale della Marina*, Dec. 31, 1916.

² *Giornale Ufficiale della Marina*, Sept. 30, 1915.

³ Decree of the Lieutenant general, May 1, 1916, No. 490, *Gazzetta Ufficiale*, May 5, 1916.

⁴ Law of July 17, 1910, No. 520, *Gazzetta Ufficiale*, Aug. 3, 1910.

SCHEDULE 53.—Italy, Army. Pay of enlisted men in active service, including yearly amounts for pay, rations, and allowances.

[Official sources, March 10, 1915.]

[Amounts outside of parentheses are given in lire; amounts inside of parentheses are given in dollars.]

Rank.	Total yearly pay and allowance in each grade.	Total yearly pay cash for each grade. ¹	Total yearly allowance, food for each grade.	Total yearly allowance, clothing for each grade.	Total yearly allowance, fuel for each grade.	Total yearly allowance, bedding for each grade.
Marshal major.....	2,822.4 (544.72)	2,314.8 (446.75)	396.0 (76.43)			
Marshal.....	2,073.6 (400.21)	1,566.0 (302.24)				
Sergeant major.....	1,544.4 (298.07)	1,036.8 (200.10)				
First sergeant.....	1,184.4 (228.59)	676.8 (130.62)				
Sergeant, trumpeter	1,792.8 (346.02)	1,285.2 (248.05)				
Sergeant.....	1,101.6 (212.61)	594.0 (114.64)				
Sapper and trumpeter, lance sergeant.....	511.2 (98.67)	180.0 (34.74)	219.6 (42.39)	43.2 (8.34)	54.0 (10.42)	14.4 (2.78)
Lance sergeant.....	493.3 (95.20)	162.0 (31.27)				
Corporal trumpeter, sapper and musician.....	439.2 (84.77)	108.0 (20.84)				
Corporal, farrier....	421.2 (81.30)	90.0 (17.37)				
Lance corporal, sapper, trumpeter	385.2 (74.35)	54.0 (10.42)				
Private.....	367.3 (70.88)	36.0 (6.95)				

¹ An additional cash allowance is paid when troops are on a war footing, at the rate of 0.75 lira (\$0.15) per day (\$54.75 annually) for sergeants and higher grades, and from 0.20 lira (\$0.04) to 0.35 lira (\$0.07) per day (\$14.60 to \$25.55 annually) for lower grades.

PENSIONS.

HISTORY AND GENERAL STATEMENT.

At the beginning of the European War and until the end of 1916 the old Italian pension system remained in force. This was based on the law of February 21, 1895, on civil and military pensions, with its subsequent amendments, and treated wounds and deaths of soldiers as exceptions in a system based primarily on length of service. The law of June 23, 1912, passed at the beginning of the Libyan War, and "valid for all future campaigns of war," by establishing the so-called "privileged" pensions for officers and soldiers on lower salaries raised indeed the amounts of pensions granted to soldiers and families most in need, but changed nothing in the essential structure of the system. This system provided invalid pensions for three categories of infirmities only, gave a flat pension to widows and orphans regardless of the size of the family, and provided support for the ascendants and collateral relatives of the deceased soldier only if the latter had been their sole support.

Under the strain of a war that called into action not merely the professional army but the total forces of the nation, the inadequacy and injustice of a system so archaic and so inelastic became increasingly evident. Public opinion expressing itself in such authoritative ways as in the official conference for all Italy on pensions, at Rome in June of 1916, the writings and lectures of the Hon. Luigi Rava, of

the Italian Parliament, and a critical study of the Italian pension system in comparison with other systems by the Hon. Ivanoe Bonomi, minister of public works, demanded that the pension law be modernized. As a model for this reform, the Government studied the proposed remodeling of the pension system of France, and the changes now in effect in the Italian system show the strong influence of the pending French bill.

The new system was instituted by the decree of the lieutenant general of November 12, 1916. It provided for an increase of pension according to the size of the deceased soldier's family, granting 630 lire (\$121.59) for a widow and two children, or to full orphans up to the number of four, and adding 50 lire (\$9.65) annually for each child under 18, changed the clause of "sole support" to "necessary and chief support," made a broad provision for illegitimate children, and promised, in the regulations to follow, a revision of the categories of disability for invalid pensions on the basis of incapacity for profitable work. These regulations, just received in this country,¹ replace the three former categories of disability by ten, and fix the pensions for these by fractions of the maximum invalid pension for Category I. For Categories IX and X, respectively (the slighter injuries), a temporary allowance and a lump sum are given and for cases where the medical authority is unable to give definite decision on the type of injury, a renewable yearly allowance is given, equal to the pension of the category provisionally fixed. This may be later canceled, in case of the soldier's improvement, or converted into a pension, if his disability is permanent. In case of aggravation of the soldier's disability he may apply for an increase of pension, according to the category of disability to which his new status of disability assigns him.

In contrast to the old conception of grading disability by unfitness for military service, the effort has been made in the new system to grade the injuries and corresponding pensions according to the soldier's loss of earning power in civil life. The disability chart, published with the new regulations of May 20, 1917, is the work, as the minister of the treasury states in his report to the lieutenant general, of a technical commission of experts, medical, legal, and actuarial, and shows the replacement of the rough and ready classification of infirmities in the old three categories by a carefully detailed scale of injuries, graded with the utmost possible scientific precision and accuracy. Traces are also evident of the purpose to compensate disfigurement, even when it involves no actual disability.

¹ Decree of the lieutenant general, May 20, 1917, No. 876, *Gazzetta Ufficiale*, June 7, 1917.

RETIREMENT PENSIONS.

Retirement pensions for officers of the Army and Navy are liquidated on the basis of their average salary for the last five years, if they themselves ask for retirement, or for the last three years if retired by law or official order. For captains and subaltern officers 300 lire (\$57.90) are added to the quinquennial or triennial average.

If the average is not above 4,000 lire (\$772) it is increased by one-fifth if the officer has not received an increase of salary for the last 12 years or has received an increase which does not amount to one-fifth of the average. In this latter case no account is taken of the increase of the last 12 years.

Taking the average as the base, the pension is computed according to the fractions given in the official tables for Army and Navy. (See Schedule 55, p. 157.) If the average is not above 2,000 lire (\$386), the pension equals the given fraction of 2,000 multiplied by the number of years of service. If the average is above 2,000, the pension equals the given fraction of 2,000 times the number of years of service plus the given fraction of any remaining sum times the number of years of service. The pension must not be less than 150 lire (\$28.95) or more than 8,000 lire (\$1,544) and must not exceed four-fifths of the average as calculated above.

Superior officers have a right to retirement pension after 30 years' service, inferior officers (subalterns) after 25 years' service. They must, however, have reached the following ages: Generals and admirals, lieutenant generals and vice admirals, and corresponding grades, 55 years; major generals, rear admirals, and corresponding grades, 55 years; superior officers, 52 years; inferior officers, 45 years.

Enlisted men have a right to retirement pensions after 20 years' service and at 42 years of age. For the marines, however, this age is reduced to 39 years if they have had 15 years' service with the fleet.

The minimum and maximum retirement pensions are paid to enlisted men according to the amounts fixed by grade on the official schedule. (See Schedule 57, footnote 1, p. 163.)

SCHEDULE 54.—Italy, Army. Retirement pensions for officers.

[Sources: Les Armées des Principales Puissances au Printemps de 1913, Paris, 1913, p. 279; Veltzé's Internationaler Armeé Almanach, 1913-14.]

[Amounts outside of parentheses are in lire; amounts inside of parentheses are in dollars.]

Grade.	Salary.	Annual pension.	
		Minimum. ¹	Maximum.
Lieutenant general.....	12,000 (2,316.00)	5,833 (1,125.77)	8,000 (1,544.00)
Major general.....	10,000 (1,930.00)	4,833 (932.77)	8,000 (1,544.00)
Colonel.....	8,000 (1,544.00)	3,833 (739.77)	6,100 (1,177.30)
Lieutenant colonel:			
After 5 years grade.....	7,000 (1,351.00)	3,942 (760.81)	5,600 (1,080.80)
Less than 5 years.....	6,000 (1,158.00)	3,406 (657.36)	4,800 (926.40)
Major:			
After 5 years grade.....	5,500 (1,061.50)	3,540 (683.22)	4,400 (849.20)
Less than 5 years.....	5,000 (965.00)	3,060 (590.58)	4,000 (772.00)
Captain:			
After 10 years grade or 25 years service.....	4,800 (926.40)	2,931 (565.68)	4,000 (772.00)
After 5 years.....	4,400 (849.20)	2,731 (527.08)	3,760 (725.68)
Less than 5 years.....	4,000 (772.00)	2,131 (411.28)	3,440 (663.92)
Lieutenant:			
After 15 years grade.....	3,600 (694.80)	2,431 (469.18)	3,120 (602.16)
After 10 years grade or 15 years service.....	3,400 (656.20)	2,181 (420.93)	3,040 (586.72)
After 5 years.....	2,800 (540.40)	1,931 (372.68)	2,480 (478.64)
Less than 5 years.....	2,400 (463.20)	1,731 (334.08)	2,160 (416.88)
Sublieutenant.....	2,000 (386.00)	1,617 (312.08)	1,840 (355.12)

¹ Superior officers, after 30 years' service; inferior officers, after 25 years' service.

SCHEDULE 55.—Italy. Fractions to be used in reckoning pensions for officers.

A. NAVY.

[Source: Law of June 27, 1909, No. 375.]

Grade.	General staff.		Naval constructors, medical and commissary corps.	
	On first 2,000 lire.	On any remaining sum.	On first 2,000 lire.	On any remaining sum.
Midshipman and sublieutenant.....	1/30	1/46	1/36	1/54
Sublieutenant of warship and lieutenant.....	1/30	1/45	1/35	1/53
Lieutenant of warship and captain.....	1/27	1/41	1/32	1/49
Captain of corvette and major.....	1/32	1/49	1/34	1/52
Captain of frigate and colonel.....	1/34	1/51	1/35	1/52
Captain of warship and colonel.....	1/37	1/55	.....	.....

B. ARMY.

[Source: Law of July 14, 1907, No. 482.]

Grade.	General staff, infantry, cavalry, artillery, constructors, permanent personnel of districts, personnel of fortresses.		Medical corps, commissary, accountants, veterinary, pharmacists.		Royal carbineers.	
	On first 2,000 lire.	On any remaining sum.	On first 2,000 lire.	On any remaining sum.	On first 2,000 lire.	On any remaining sum.
Sublieutenant.....	1/34	1/51	1/38	1/55	1/36	1/55
Lieutenant.....	1/33	1/50	1/35	1/53	1/35	1/53
Captain.....	1/33	1/50	1/36	1/55	1/35	1/52
Major.....	1/35	1/52	1/38	1/57	1/37	1/55
Lieutenant colonel.....	1/37	1/56	1/38	1/57	1/37	1/55
Pharmacist, first class.....	1/37	1/56	1/37	1/56	1/37	1/55
Pharmacist, chief, second class.....	1/37	1/56	1/37	1/55	1/37	1/55
Pharmacist, chief, first class.....	1/37	1/56	1/35	1/53	1/37	1/55
Chemical-pharmaceutical director.....						
Chemical-pharmaceutical inspector.....						

DISABILITY PENSIONS.

Disability pensions for officers for injuries incurred in service, according to Category I of the old law, are equal to four-fifths of the officer's salary increased by one-half; and for soldiers they are equal to the maximum retirement pensions given on the official table increased by two-thirds. (See Schedules 56 and 57, pp. 160 to 163.)

For the "privileged" pensions granted for injuries incurred in war to officers and soldiers who have claim to disability pensions not exceeding 3,000 lire (\$579), one-fifth is added to the amounts computed as above. These privileged pensions may not exceed 3,000 lire (\$579).

The new pension regulations of May 20, 1917, remodel the system of invalid pensions as follows: Ten categories of disability take the place of the previous three, ranging from blindness and loss of all the limbs to the lightest grades of injury. The maximum pension, that of Category I for total disability (100 per cent loss of earning power) is retained from the old system. It is notable that the pensions of this category are larger in amount than the corresponding ones granted by any other continental nation among the belligerents. The pensions of Categories II to VIII inclusive are equal to 80, 75, 70, 60, 50, 40, and 30 per cent of the pension of Category I, respectively. Privileged pensions are paid to officers whose normal pension amounts to less than 3,000 lire (\$579) and are reckoned by adding one-fifth to the amounts computed as above. Privileged pensions for noncommissioned officers and enlisted men are fixed by the official table attached to the decree of May 20, 1917. (See Schedule 57, footnote 1, p. 163.) For the injuries of Category IX a temporary allowance is paid, equal to the pension of Category VIII, during from three to six years, provided that the soldier or officer has not the right to the retirement pension. For injuries of Category X, provided again that the injured man has not the right to the retirement pension, an indemnity is paid in a lump sum varying from six months' payment of the pension for Category VIII to two years' payments, but a claim for this indemnity involves renunciation of the claim to a pension. When the military medical authority can not decide the question of the seriousness of the injury or of its permanence, a renewable allowance is paid, equal to the pension of the category provisionally fixed, for from one year to five years according to the time fixed for the next medical consultation. If at the end of this period the injury is recognized as permanent, the renewable allowance is changed to a pension, or, if doubt still exists, the allowance may be further prolonged, but not for more than eight years including the first period. At the end of this time a definite medical decision must be given, according to which the allowance must either be converted into a pension, or into the temporary allowance or lump sum payment spoken of

above, or otherwise must be cancelled. In case of aggravation of infirmity, a soldier may apply for increase of pension.¹

A noteworthy innovation in the law is the increased provision for the most serious types of injury. If a soldier's disability indispensably requires the assistance of another person, he has the right to a supplementary allowance as well as to the pension due him. This allowance amounts to 150 lire (\$28.95) annually and may in the most serious cases be doubled. The privileged pension, moreover, is subject to increase for length of service. An officer after five years of service, or a soldier after eight years of service, receives for every year of active service or campaign one-twentieth of the difference between the minimum retirement pension and the privileged pension, provided the privileged pension does not exceed the amount of the minimum retirement pension. If, on the other hand, the officer or soldier has served the 20 years required for a retirement pension, he receives as the privileged pension the amount of the retirement pension plus one-tenth, if this results more favorably than the pension computed in percentage of the disability pension of Category I.

¹ Decree of the lieutenant general, May 1, 1916, No. 497, 4 *Gazzetta Ufficiale*, May 6, 1916.

SCHEDULE 56.—Italy. Disability pensions to officers for injuries incurred in war.

[Based on law of Feb. 21, 1895, No. 70, codified text (Codici, e Leggi Usuali d'Italia, Vol. II, pp 2693, ff. Milan, Hoepli, 1905; law of June 23, 1912, No. 667 (Gazz. Uff., July 5, 1912); decree of the lieutenant general, Nov. 12, 1916, No. 1598 (Gazz. Uff., Nov. 28, 1916); decree of the lieutenant general, May 20, 1917, No. 876 (Gazz. Uff., June 7, 1917).]

[Amounts given outside of parentheses are in lire; amounts given inside of parentheses are in dollars.]

Grade.		Salary.	Pensions (annual amounts) for the categories of disability indicated below. ³								Temporary allowance. ⁴	Lump-sum payment. ⁵
Army.	Navy.		100 per cent in validity. I. ²	80 per cent of I. II.	75 per cent of I. III.	70 per cent of I. IV.	60 per cent of I. V.	50 per cent of I. VI.	40 per cent of I. VII.	30 per cent of I. VIII.		
Lieutenant general...	Vice admiral.....	12,000 (2,316)	8,000 (1,544)	8,000 (1,544)	8,000 (1,544)	8,000 (1,544)	8,000 (1,544)	7,200 (1,389.60)	5,760 (1,111.68)	4,320 (833.76)	4,320 (833.76)	2,160-8,640 (416.88)-(1,667.52)
Major general.....	Rear admiral.....	10,000 (1,930)	8,000 (1,544)	8,000 (1,544)	8,000 (1,544)	8,000 (1,544)	8,000 (1,544)	6,000 (1,158)	4,800 (928.40)	3,600 (694.80)	3,600 (694.80)	1,800-7,200 (347.40)-(1,389.60)
Colonel.....	Captain of warship..	8,000 (1,544)	8,000 (1,544)	7,350 (1,418.55)	6,880 (1,323.98)	5,880 (1,134.84)	5,880 (1,134.84)	4,900 (945.70)	3,920 (756.56)	3,000 (579)	3,000 (579)	1,500-6,000 (289.50)-(1,158.00)
Lieutenant colonel: After 5 years' grade. Less than 5 years.	Captain of frigate: After 5 years..... Less than 5 years	7,000 (1,351) 6,000 (1,158)	8,000 (1,544) 7,200 (1,389.60)	6,720 (1,286.96) 5,760 (1,111.68)	5,880 (1,134.84) 5,040 (972.72)	5,040 (972.72) 4,320 (833.76)	5,040 (972.72) 4,320 (833.76)	4,200 (810.60) 3,000 (604.80)	3,360 (648.48) 3,000 (579)	3,000 (579) 2,592 (500.26)	3,000 (579) 2,592 (500.26)	1,500-6,000 (289.50)-(1,158.00)
Major: After 5 years' grade. Less than 5 years.	Captain of corvette: After 5 years..... Less than 5 years	5,500 (1,061.50) 5,000 (965)	6,600 (1,273.80) 6,000 (1,158)	4,950 (953.35) 4,500 (868.50)	4,620 (891.66) 4,200 (810.60)	3,960 (764.28) 3,600 (694.80)	3,960 (764.28) 3,600 (694.80)	3,300 (636.90) 3,000 (579)	3,000 (579) 2,880 (555.84)	2,376 (458.57) 2,160 (416.88)	2,376 (458.57) 2,160 (416.88)	1,188-4,752 (229.28)-(917.14)
Captain: After 10 years' grade or 25 years' service. After 5 years..... Less than 5 years.	Lieutenant of warship: After 10 years.... After 5 years..... Less than 5 years	4,800 (928.40) 4,400 (849.20) 4,000 (772.00)	6,120 (1,181.16) 5,640 (1,088.52) 5,160 (995.88)	4,806 (944.93) 4,512 (870.82) 4,128 (796.70)	4,284 (828.81) 3,948 (761.96) 3,612 (697.12)	3,672 (708.70) 3,384 (653.11) 3,006 (597.53)	3,672 (708.70) 3,384 (653.11) 3,006 (597.53)	3,060 (590.58) 3,000 (579) 3,000 (579)	2,937.6 (568.96) 2,707.2 (522.49) 2,477 (478.06)	2,203.2 (426.22) 2,030 (391.79) 1,858 (358.59)	2,203.2 (426.22) 2,030 (391.79) 1,858 (358.59)	1,101.6-4,406.4 (212.61)-(850.44) 1,015-4,060 (215.20)-(783.58) 929-3,716 (179.30)-(717.19)
Lieutenant: After 15 years' grade.	Sublieutenant of warship: After 15 years....	3,600 (694.80)	4,680 (903.24)	3,744 (722.59)	3,276 (632.27)	3,000 (579)	3,000 (579)	2,808 (541.94)	2,246 (433.48)	1,685 (325.21)	1,685 (325.21)	842.5-3,370 (162.60)-(650.41)

After 10 years' grade or 25 years' service.	After 10 years...	3,400	4,440	3,882	3,330	3,108	3,000	2,664	2,131	1,506	1,326	709-3,196 (154.21)-(516.82)
After 5 years....	After 5 years....	2,800	3,720	3,000	3,000	3,000	2,678	2,232	1,786	1,339	1,239	689.5-2,678 (128.21)-(516.85)
Less than 5 years.	Less than 5 years	2,400	3,240	3,000	2,916	2,721.6	2,333	1,944	1,555	1,166	1,166	588-2,332 (113.48)-(50.08)
Sublieutenant.....	Midshipman.....	2,000	3,000	2,880	2,700	2,520	2,160	1,800	1,440	1,080	1,080	540-2,160 (104.22)-(416.88)
		(386.00)	(579)	(555.84)	(521.10)	(486.36)	(416.88)	(347.40)	(277.52)	(206.44)	(206.44)	

SCHEDULE 57.—Italy. "Privileged" pensions to noncommissioned officers and other enlisted men disabled in war.^{1 2}

[Source: **Official** table attached to the decree of the lieutenant general, May 20, 1917, No. 876, confirming the regulations for the execution of Art. 22 of the decree of Nov. 12, 1916, No. 1598, on "privileged" war pensions (Gazz. Uff. June 7, 1917), with additions according to the text of the decree.]

[Amounts given outside of parentheses are in lire, amounts given inside of parentheses are in dollars.]

Amounts granted for disability incurred in war.													
		Pension (annual) for Categories I.—								Temporary allowance* for Category IX. 20 per cent.	Lump sum payment* for Category X. 10 per cent.	Yearly increase* after 8 years' service.	Alternative pension* after 20 years' service.
		I. 100 per cent.	II. 80 per cent.	III. 75 per cent.	IV. 70 per cent.	V. 60 per cent.	VI. 50 per cent.	VII. 40 per cent.	VIII. 30 per cent.				
Army	Navy												
a. Aid, marshal, and master at arms.	Boatswain of first and second class and others of equivalent grade.	3,000 (579)	2,419 (468.87)	2,268 (437.72)	2,116 (408.39)	1,814 (350.10)	1,512 (291.82)	1,209 (233.34)	907 (175.05)	907 (175.05)	453.5-1,814 (87.53-350.10)		
b. Quartermaster major, quartermaster, sergeant major, brigadier of Royal carbineers, sergeant, vice brigadier of Royal carbineers.	Second boatswain and others of equivalent grade.	2,240 (432.32)	1,793 (345.86)	1,680 (324.34)	1,538 (302.42)	1,344 (259.89)	1,120 (216.16)	896 (172.98)	672 (129.70)	672 (129.70)	336-1,344 (64.85-259.89)		
c. Corporal major, candidate of Royal carbineers, corporal and carbineer.	Subboatswain and others of equivalent grade.	1,580 (324.34)	1,344 (259.89)	1,269 (243.18)	1,176 (228.97)	1,008 (194.64)	840 (162.12)	672 (129.70)	504 (97.27)	504 (97.27)	252-1,008 (48.64-194.64)	(If x=minimum retirement pension, and y=privileged pension) 1/20 of (x-y).	(If x=retirement pension) x + 1/10.
d. Candidate, private, and student carbineer.		1,200 (243.18)	1,008 (194.64)	945 (182.39)	882 (170.23)	756 (145.91)	630 (121.59)	504 (97.27)	378 (72.95)	378 (72.95)	189-756 (36.48-145.91)		
e.	class of other categories.	1,006 (205.74)	852 (164.44)	700 (154.21)	746 (143.96)	630 (123.33)	533 (102.87)	426 (82.22)	319 (61.57)	319 (61.57)	159.5-638 (30.78-123.13)		

eight categories. The duration of the allowance shall not be less than a year or longer than 5.

¹ The maximum "privileged" war pension (Category I) is computed by adding 1/5 to the disability pension, Category I, peace basis, which equals the maximum retirement pension plus 2/3. (Law of June 23, 1912, no. 867, Art. 2, Gazz. Uff. July 5, 1912, and law of Feb. 21, 1906, no. 70, Art. 160, Codice e Leggi Usuali d'Italia, Vol. II, p. 2603, Milan, Hoepli, 1905.)

Grade.	Retirement pension.			Disability pension for Category 1, peace basis.
	Minimum, 20 years' active service.	Increase per year.	Maximum, 32 years' active service.	
a.....	1,000 (203.44)	35 (6.95)	1,512 (291.82)	2,520.00 (495.38)
b.....	760 (148.08)	30 (5.79)	1,120 (216.16)	1,868.67 (360.27)
c.....	600 (115.80)	20 (3.86)	840 (162.12)	1,400.00 (270.20)
d.....	510 (98.43)	10 (1.93)	630 (121.59)	1,050.00 (202.65)
e.....	425 (82.03)	9 (1.74)	533 (102.87)	888.33 (171.45)

² Families of soldiers permanently disabled in war receive (in addition to the soldier's disability pension) the same allowances as the families of soldiers called to or retained with law of Mar. 25, 1917, no. 481, Gazz. Uff.

give a definite decision on the seriousness of the injury and the court of accounts shall pay him pension due him on the basis of the first that the injury falls within the first

In all belligerent countries it has been found necessary in various ways to supplement the existing provisions of the pension laws. Even in countries with a revised pension system such as Italy's, supplementary legislation has been found necessary. A modern type of provision supplementary to the disability pension is shown in the legislation extending the payment of the separation allowance to the families of soldiers permanently disabled in war. This has been done in Italy by the law establishing the National Institute for War Invalids (*Opera Nazionale*).¹

The allowance is extended without limitation on the same terms as to the families of soldiers called to or retained with the colors.

The National Institute coordinates and centralizes the work of the previously existing relief agencies for the assistance of wounded soldiers, acting through and with them apparently as a sort of central clearing house. It is supported by public appropriations and by private contributions.

The law makes elaborate provision for the care and reeducation of wounded soldiers and provides payment of allowances to them during treatment and training. Whatever the degree of earning power reestablished by the treatment, the pension provisions remain unchanged. A soldier is, however, penalized for refusing treatment by loss of part or all of his pension.

PENSIONS TO WIDOWS AND OTHER DEPENDENTS.

The remodeled and modernized regulations for dependents' pensions were established by the decree of the lieutenant general of November 12, 1916. These were not changed by the regulations of May 20, 1917.

Dependents of officers dying of injuries or disease incurred in service receive one-half of the officer's pension in case this does not exceed 3,000 lire (\$579) and otherwise 40 per cent of the officer's salary. Dependents of soldiers (noncommissioned officers and enlisted men) receive under the same circumstances one-half the maximum pension of Category I. These general rules are subject to such changes and exceptions as will be noted.

Dependents having a right to the pension are widows, children under 18 years of age (including illegitimate children under certain conditions), or parents, or orphan brothers and sisters under 18 years of age. According to the regulations the widow alone, the widow and one child, or the widow and two children receive the same amount. For each ad-

¹ Law of Mar. 25, 1917, No. 481, *Gazzetta Ufficiale*, Apr. 2, 1917.

ditional child under 18 years of age there is an annual increase of 50 lire (\$9.65). If there is no widow, the orphans receive the full pension, the amount increasing 50 lire (\$9.65) annually for each orphan under 18 years of age beyond the number of four.

If the widow for any reason lives apart from any or all of the children, the pension is divided, one-half going to the widow and the other half being divided equally among all the children who have the right to it, except that in case there is only one child he receives one-fourth. In case of the division between the widow and children the 50 lire (\$9.65) increase goes wholly to the children.

If the widow is unable to obtain the pension because her marriage during the soldier's term of service was not authorized according to the requirements of the military authorities, the legitimate children receive it; provided the marriage was contracted before the time of the wounds or disease leading to the father's death—or the legitimated children if born before the same time.

Provision for illegitimate children legally recognized is made under the following conditions: In absence of others having claim to the pension, illegitimate children may receive the full amount; in presence of the widow or of legitimate or legitimated children of the soldier, they are considered as orphans of a previous marriage and receive the same share in the allowance as any other child. In case, however, of the division of the pension spoken of above, the share of each is decreased one-fifth, this amount being added to the share of the other participants, whose normal share is decreased by the presence of the illegitimates. When parents or brothers or unmarried sisters under age have a competitive claim to the pension the pension is divided in halves between them and the illegitimates. To acquire the right to a pension, illegitimate children must have been acknowledged by the soldier 90 days before the conclusion of peace.

In absence of widow or orphans, ascendants and collateral relatives have a claim to the full pension if the soldier has been their necessary and chief support. The father receives the pension if he is a widower, or blind, or 50 years old, or incapable of wage earning; and also if, even after the soldier's death, he becomes destitute through no fault of his own within a period of five years. The mother under the same conditions may receive it, even if she becomes a widow within a period of five years after the soldier's death. If she lived separated from her husband by no fault of her own and received no support from him, she may receive the full amount of the pension, provided her other circumstances entitle her to it. If the father, however, has also the legal requirements for the pension, it will be divided equally between them. In case of her remarriage the mother ceases to receive the pension.

Even the mother of an illegitimate son, if unmarried and satisfying the other condition of dependence, may receive in the event of the son's death the full amount of the pension. For the purpose of the pension, however, she must legally have recognized the son before November 12, 1916. In case the father, through a penal sentence, has suffered loss or suspension of the pension, the mother receives two-thirds of the amount.

Orphan brothers and unmarried sisters in the absence of other claimants, if under 18 and dependent on the soldier, may also receive the full amount of the pension.

The family of a soldier dying in captivity from injuries incurred in service receive the full pension; if cause of service is unproved, two-thirds of the pension, unless their right to it is disproved, or unless, in the judgment of the Court of Accounts, the ordinary allowance is more favorable. The family of a soldier declared missing in the absence of news from him for four months is granted a pension to the same amount and by the same rules as the family of a soldier dying in captivity.

The decree of the lieutenant general of March 15, 1917,¹ provides a food allowance for indigent parents of a soldier dead or missing.

By far the largest dependent's pension granted is given to the widow and children of any Italian executed for political reasons during the war at the hands of the Austro-Hungarian Government. The widow receives 1,800 lire (\$347.40), and each child up to 21 years of age 600 lire (\$115.80). The law establishing this pension is of special interest as having first introduced into the Italian legislation the principle of the sliding scale of pensions in accordance with the size of the family, which was later confirmed and incorporated in the new pension laws.

In case of her remarriage, the widow forfeits her pension but receives a lump sum equal to four yearly payments of the pension, if she is not above 35 years of age and if there are no orphans. She may otherwise, if she is not above 50 years of age, receive a lump sum equal to three yearly payments.

Pensions to all children cease as they become of age and pensions to daughters at their marriage.

The annual increase of 50 lire (\$9.65) for each child beyond two or each full orphan beyond four is reduced or ceases as the number of persons entitled is reduced by the children's coming of age, by marriage (in the case of a girl), by death, etc.

When it is learned after payment of a pension to parents that these parents have other sources of income which enable them to provide

¹ Giornale Militare Ufficiale, No. 261, Apr. 13, 1917.

at least in part for their own support, the pension is reduced by one-third, one-half, or two-thirds, or canceled, according to the amount of the ascertained income. In like manner if the parents from a state of indigence come into circumstances which would not justify the claim to a pension, the pension is reduced as above or revoked. The same conditions of reduction or forfeiture apply to orphan brothers and sisters.

SCHEDULE 58.—Italy. Pensions to widows and other dependents of officers killed

[Based on law of Feb. 21, 1895, No. 70, codified text (Codici e Leggi Usuali d'Italia, Vol. II, pp. 2693, ff. general, Sept. 7, 1916, No. 1185 (Gazz. Uff. Sept. 22, 1916); decree of the lieutenant general, Nov. 12, 1916, June 7, 1917).]

[Amounts outside of parentheses are in lire; amounts inside of parentheses are in dollars.]

Beneficiaries.	Stipulations.	Deceased.		
		Lieutenant general.	Major general.	Colonel.
		Vice admiral.	Rear admiral.	Captain of war-ship.
	<i>Pensionable salary</i>	12,000 (2,316)	10,000 (1,930)	8,000 (1,544)
Widow and orphans:				
Widow ¹	If marriage was authorized according to the requirements of the military authorities. ²	4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
Widow and one child.....		4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
Widow and two children..		4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
Each additional child. ^{2 4}		50 (9.65)	50 (9.65)	50 (9.65)
Full orphans to number of four.	If under 18 years of age and (in case of daughters) unmarried.	4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
Each additional orphan. ²		50 (9.65)	50 (9.65)	50 (9.65)
Illegitimate children.....	If legally recognized: ⁵			
	a. In absence of others having claim.....	4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
	b. In competition with parents or brothers or unmarried sisters under age. ⁶	2,000 (386.00)	2,000 (386.00)	1,600 (308.80)

¹ On remarriage widow forfeits pension but receives a lump sum equal to four yearly payments of pension if she is not above 35 and there are no orphans. Otherwise widow may receive lump sum equal to three yearly payments if she is not above 50 years of age.

^a If widow is unable to obtain pension because her marriage was not authorized as required by the military authorities (a) the legitimate children receive pension if marriage was contracted before time of wounds or disease leading to father's death, (b) the legitimated children born before said time.

* The increase ceases or is reduced by degrees to nothing as the number of children on the base of which pension is liquidated is reduced by children's reaching 18, marriage, death, etc.

⁴ Law of Feb. 21, 1895, No. 70 (codified text), art. 106. When the widow for any reason lives apart from any or all of the children of her own or of a former marriage of the soldier, she receives one-half the indemnity

in war, dying of injuries incurred in service, dying in captivity, or missing.

Milan, Hoepli, 1905); law of June 23, 1912, No. 667 (Gazz. Uff. July 5, 1912); decree of the lieutenant No. 1598 (Gazz. Uff. Nov. 28, 1916); decree of the lieutenant general, May 20, 1917, No. 876 (Gazz. Uff.

[Amounts outside of parentheses are in lire; amounts inside of parentheses are in dollars.]

Deceased—Continued.											
Lieutenant colonel.		Major.		Captain.			Lieutenant.				Sub-lieutenant.
After 5 years in grade.	Less than 5 years in grade.	After 5 years in grade.	Less than 5 years in grade.	After 10 years in grade or 25 years' service.	After 5 years in grade.	Less than 5 years in grade.	After 15 years in grade.	After 10 years in grade or 25 years' service.	After 5 years in grade.	Less than 5 years in grade.	
Captain of frigate.		Captain of corvette.		Lieutenant of warship.			Sublieutenant of warship.				Midshipman.
After 5 years.	Less than 5 years.	After 5 years.	Less than 5 years.	After 10 years.	After 5 years.	Less than 5 years.	After 15 years.	After 10 years.	After 5 years.	Less than 5 years.	
7,000 (1,351)	6,000 (1,158)	5,500 (1,060.50)	5,000 (965.00)	4,800 (926.40)	4,400 (849.20)	4,000 (772.00)	3,600 (694.80)	3,400 (656.20)	2,800 (540.40)	2,400 (463.20)	2,000 (386.00)
2,800 (540.40)	2,400 (463.20)	2,200 (424.60)	2,000 (386.00)	2,040 (393.72)	1,880 (362.84)	1,720 (330.96)	1,560 (301.08)	1,480 (285.64)	1,240 (238.32)	1,080 (208.44)	1,500 (289.50)
2,800 (540.40)	2,400 (463.20)	2,200 (424.60)	2,000 (386.00)	2,040 (393.72)	1,880 (362.84)	1,720 (330.96)	1,560 (301.08)	1,480 (285.64)	1,240 (238.32)	1,080 (208.44)	1,500 (289.50)
2,800 (540.40)	2,400 (463.20)	2,200 (424.60)	2,000 (386.00)	2,040 (393.72)	1,880 (362.84)	1,720 (330.96)	1,560 (301.08)	1,480 (285.64)	1,240 (238.32)	1,080 (208.44)	1,500 (289.50)
50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)
2,800 (540.40)	2,400 (463.20)	2,200 (424.60)	2,000 (386.00)	2,040 (393.72)	1,880 (362.84)	1,720 (330.96)	1,560 (301.08)	1,480 (285.64)	1,240 (238.32)	1,080 (208.44)	1,500 (289.50)
50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)	50 (9.65)
2,800 (540.40)	2,400 (463.20)	2,200 (424.60)	2,000 (386.00)	2,040 (393.72)	1,880 (362.84)	1,720 (330.96)	1,560 (301.08)	1,480 (285.64)	1,240 (238.32)	1,080 (208.44)	1,500 (289.50)
1,400 (270.20)	1,200 (231.60)	1,100 (212.30)	1,000 (193.00)	1,020 (196.86)	940 (308.80)	860 (165.98)	780 (150.54)	740 (142.82)	620 (119.66)	540 (104.22)	750 (144.75)

or the widow's pension. The other half shall be divided in equal parts among all the children of the dead soldier who are entitled to it. If there is but one child that child receives one-fourth of the indemnity or the widow's pension.

⁵ To acquire right to pension illegitimate children must have been acknowledged by the officer not later than 90 days before the conclusion of peace.

⁶ In competition with the widow or with the legitimate or legitimated children of the deceased, illegitimate children are considered as orphans of a previous marriage. In case of the division of the pension (see footnote 4) the share of each one of the illegitimates is reduced by one-fifth, this amount going to increase the shares of the other participants.

SCHEDULE 58.—*Italy. Pensions to widows and other dependents of officers killed in*

Beneficiaries.	Stipulations.	Deceased.		
		Lieutenant general.	Major general.	Colonel.
		Vice admiral.	Rear admiral.	Captain of warship.
In absence of widow or orphans:				
Father ¹	If widowed, blind, 50 years old, or incapable of profitable work, or within 5 years of son's death becoming destitute, not by his own fault.	4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
Mother ¹	Under same conditions, even if she becomes widowed within 5 years of son's death.	4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
	Living separated from father not by her own fault, and receiving no support from him, if 50 years old, blind, or incapable of profitable work at son's death. ²	4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
	Of illegitimate son, legally recognized by her before Nov. 12, 1916, if mother is unmarried, blind, 50 years old, or incapable of profitable work.	4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
	If father through a penal sentence suffers loss or suspension of the pension. ³	2,667 (534.53)	2,667 (534.53)	2,133 (411.67)
Orphan brothers and sisters.	If under age and (in case of sisters) unmarried. ⁴	4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
Family.....	If officer dies in captivity:			
	a. Because of injuries in service.....	4,000 (772.00)	4,000 (772.00)	3,200 (617.60)
	b. If cause of death unproved ⁵	2,667 (534.53)	2,667 (534.53)	2,133 (411.67)

¹ Maximum amount. For reductions see pp. 166-167.² If, however, father has legal requirements for obtaining pension, it will be divided in equal parts between the parents. In case of remarriage the mother ceases to receive the pension.³ Temporary allowance. At father's death mother receives full pension.

war, dying of injuries incurred in service, dying in captivity, or missing—Continued.

Deceased—Continued.

Lieutenant colonel.		Major.		Captain.			Lieutenant.				Sub-lieutenant.
After 5 years in grade.	Less than 5 years in grade.	After 5 years in grade.	Less than 5 years in grade.	After 10 years in grade or 25 years' service.	After 5 years in grade.	Less than 5 years in grade.	After 15 years in grade.	After 10 years in grade or 25 years' service.	After 5 years in grade.	Less than 5 years in grade.	
Captain of frigate.		Captain of corvette.		Lieutenant of warship.			Sublieutenant of warship.				Midshipman.
After 5 years.	Less than 5 years.	After 5 years.	Less than 5 years.	After 10 years.	After 5 years.	Less than 5 years.	After 15 years.	After 10 years.	After 5 years.	Less than 5 years.	
2,800 (540.40)	2,400 (463.20)	2,200 (484.60)	2,000 (386.00)	2,040 (393.72)	1,880 (362.84)	1,720 (330.96)	1,560 (308.08)	1,480 (285.64)	1,240 (238.32)	1,080 (208.44)	1,500 (289.50)
2,800 (540.40)	2,400 (463.20)	2,200 (484.60)	2,000 (386.00)	2,040 (393.72)	1,880 (362.84)	1,720 (330.96)	1,560 (308.08)	1,480 (285.64)	1,240 (238.32)	1,080 (208.44)	1,500 (289.50)
2,800 (540.40)	2,400 (463.20)	2,200 (484.60)	2,000 (386.00)	2,040 (393.72)	1,880 (362.84)	1,720 (330.96)	1,560 (308.08)	1,480 (285.64)	1,240 (238.32)	1,080 (208.44)	1,500 (289.50)
2,800 (540.40)	2,400 (463.20)	2,200 (484.60)	2,000 (386.00)	2,040 (393.72)	1,880 (363.84)	1,720 (330.96)	1,560 (308.08)	1,480 (285.64)	1,240 (238.32)	1,080 (208.44)	1,500 (289.50)
1,867 (364.53)	1,600 (308.80)	1,467 (284.96)	1,333 (257.27)	1,360 (262.48)	1,253 (241.83)	1,147 (221.37)	1,040 (200.72)	987 (190.49)	827 (159.61)	720 (138.96)	1,000 (193.00)
2,800 (540.40)	2,400 (463.20)	2,200 (484.60)	2,000 (386.00)	2,040 (393.72)	1,880 (363.84)	1,720 (330.96)	1,560 (308.08)	1,480 (285.64)	1,240 (238.32)	1,080 (208.44)	1,500 (289.50)
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¹ If officer has been their necessary and chief support.

² Family may receive ordinary allowance if this is more favorable. If officer is declared missing, pension is reckoned as if he had died in captivity.

During the interval between claim to a pension and its payment, provision is made for monthly payments on account to the indigent dependents of deceased soldiers. Grant of these payments is made by the minister of the treasury if proof is given of the urgent need of the claimants through loss of their chief and necessary support. Such payments are granted for a year but under exceptional circumstances may be extended. They may not amount to more than three-fifths of the pension presumably due. In the capital of a Province these payments are made by the local section of the royal treasury and in other communes by the postal officials.¹

OTHER SOURCES OF MAINTENANCE.

The temporary allowance and the renewable allowance given for a disability of Category IX and for the case where definite decision can not be made on the seriousness and permanence of a soldier's injury, respectively, may revert to the family in case of the soldier's death according to the apposite articles of the basic pension law. The temporary allowance, however, can be granted dependents only for so long as it was originally granted to the soldier.² For the continuance to dependents of the extra pay given with the medal for military valor application must be made to the division of pensions in the ministry of the treasury.

Sons of officers and soldiers deceased from injuries incurred in service are given free educational opportunities, board and tuition in military schools and colleges, and preference for appointments in the Government service. Special preference is given to children of the families most in need. Such share in the pension as a boy may have who is thus being educated at the Government's expense, is transferred to the other children entitled to the pension. All minor dependents of officers and soldiers under these conditions are exempt from school taxes.

Daughters of pensioned sailors or daughters pensioned after their father's death receive at their marriage, in case they are still under 18, a lump sum as dower equal to one-half the father's annual pension. Daughters of pensioned marines receive similarly not less than 100 lire (\$19.30).³

ADMINISTRATION.

Military pensions, like civil pensions, are paid from a general pension fund invested in Government securities. To create this fund all minor pension funds were consolidated, Government appropriations were made, and a system of assessment instituted on the salaries of all civil and military employees.

¹ Decree of lieutenant general, Nov. 12, 1916, No. 1598, *Gazzetta Ufficiale*, Nov. 28, 1916.

² Decree of lieutenant general, May 20, 1917, No. 876, *Gazzetta Ufficiale*, June 7, 1917.

³ Law of Feb. 21, 1895, No. 70, codified text, *Codici e Leggi Usuali d'Italia*, Milan, Hoepli, 1905.

c In competition with parents, or brothers and un- married sisters under 18 years of age.		750 (144. 75)	500 (108. 08)	420 (81. 06)	315 (60. 80)	204. 50 (51. 43)
Other dependents (in absence of widow and orphans), if soldier has been their necessary and chief support: d						
Father is.....		1, 500 (289. 50)	1, 120 (216. 16)	840 (162. 12)	630 (121. 59)	533 (102. 87)
Mother is.....		1, 500 (289. 50)	1, 120 (216. 16)	840 (162. 12)	630 (121. 59)	533 (102. 87)
Orphan brothers and sisters.....		1, 500 (289. 50)	1, 120 (216. 16)	840 (162. 12)	630 (121. 59)	533 (102. 87)
		1, 000 (193. 00)	747 (144. 17)	560 (108. 08)	420 (81. 06)	355 (88. 33)
		1, 500 (289. 50)	1, 120 (216. 16)	840 (162. 12)	630 (121. 59)	533 (102. 87)

ⁱ Dependents of a soldier dying in captivity from injuries incurred in service receive the full pension. If connection between his death and the service is unproved, the dependents receive two-thirds of this pension unless the ordinary allowance is judged more favorable. Pensions to dependents of a soldier missing are paid to the same amounts and on the same conditions.

ⁿ on the chart, a provision by special decree (decrees of the lieutenant general, Sept. 7, 1916, No. 1185, Garz. Uff Sept. 22, 1916) should be \$347.40 to the widow and L. 600 (\$115.80) to each child under 21 of any Italian citizen executed for political reasons by the Austro-Prussians, but receives a lump sum equal to 4 yearly payments, if she is not above 35 years of age and there are no orphans; otherwise the widow may receive a lump sum equal to 3 yearly payments if she is not above 30 years of age.

^o Law of Feb. 21, 1895, No. 70 (codified text), Art. 108.

When the widow for any reason lives apart from any or all of the children of her own or of a former marriage of the soldier, she receives one-half the widow's pension or indemnity.

When reaching 18 years
division of the pension
or two-thirds, accord-
ing
to receive the pension.

During the interval between claim to a pension and its payment, provision is made for monthly payments on account to the indigent dependents of deceased soldiers. Grant of these payments is made by the minister of the treasury if proof is given of the urgent need of the claimants through loss of their chief and necessary support. Such payments are granted for a year but under exceptional circumstances may be extended. They may not amount to more than three-fifths of the pension presumably due. In the capital of a Province these payments are made by the local section of the royal treasury and in other communes by the postal officials.¹

OTHER SOURCES OF MAINTENANCE.

The temporary allowance and the renewable allowance given for a disability of Category IX and for the case where definite decision can not be made on the seriousness and permanence of a soldier's injury, respectively, may revert to the family in case of the soldier's death according to the apposite articles of the basic pension law. The temporary allowance, however, can be granted dependents only for so long as it was originally granted to the soldier.² For the continuance to dependents of the extra pay given with the medal for military valor application must be made to the division of pensions in the ministry of the treasury.

Sons of officers and soldiers deceased from injuries incurred in service are given free educational opportunities, board and tuition in military schools and colleges, and preference for appointments in the Government service. Special preference is given to children of the families most in need. Such share in the pension as a boy may have who is thus being educated at the Government's expense, is transferred to the other children entitled to the pension. All minor dependents of officers and soldiers under these conditions are exempt from school taxes.

Daughters of pensioned sailors or daughters pensioned after their father's death receive at their marriage, in case they are still under 18, a lump sum as dower equal to one-half the father's annual pension. Daughters of pensioned marines receive similarly not less than 100 lire (\$19.30).³

ADMINISTRATION.

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³ Law of Feb. 21, 1895, No. 70, codified text, *Codici e Leggi Usuali d'Italia*, Milan, Hoepli, 1905.

Pensions are paid monthly by the court of accounts, and all claims must be filed with the general secretary.

It is not surprising that an administration adapted to the regular course of business in times of peace should have been unable to meet the strain of the terrific demands of the war. Private effort responded to the general need, and the Consorzio Laziale di Assistenza ai Lavoratori, with the assistance of prominent lawyers and members of Parliament, assumed throughout all Italy the task of expediting the claims to pensions and their payment. On its side the Government has made large increases in the force of men employed and used every effort to make headway through the enormous amount of business. The formalities of the old procedure have been to some extent modified in the interest of efficiency; a decree of April 2, 1916, canceled the obligation to secure a retirement certificate before obtaining a disability pension or allowance, and a decree of May 1, 1916, further simplified the procedure. In the decree of November 12, 1916, the limit set for the payment of the individual's pension is two years.

SCHEDULE 60.—Italy. *Categories of disability for soldiers mutilated or invalided because of war or other events of service.*¹

CATEGORY I.

1. Loss of four limbs, from complete loss to loss of hands and feet only.
2. Loss of three limbs, from complete loss to loss of two hands and one foot.
3. Organic and incurable changes in both eyes, with resulting absolute and permanent blindness.
4. Loss of upper limbs, from complete loss to loss of both hands only.
5. Permanent, incurable and serious changes of mental faculties to the point of rendering the individual totally incapable of any profitable work, or dangerous to himself or others.
6. Lesions of the central nervous system (brain and spinal marrow) with permanent consequences serious enough to cause, either singly or together, profound and irreparable disturbance to the functions most necessary to organic and social life.
7. Loss of both lower limbs (disarticulation or amputation of the thighs).
8. Loss of two limbs, upper and lower on the same side (disarticulation or amputation of the arm and thigh).
9. Organic and incurable change in one eye, producing its absolute and permanent blindness, with the visual acuteness of the other eye reduced to the power to count the fingers at the distance of ordinary short-distance vision.
10. Loss of an upper and lower limb, not on the same side (disarticulation or amputation of arm and thigh).
11. Total loss of one hand and two feet.
12. Total loss of one hand and one foot.
13. Total loss of all the fingers of two hands, or total loss of two thumbs and six or seven fingers.
14. Total loss of one thumb and eight other fingers.
15. Total loss of five fingers of one hand and of the first two of the other.
16. Total loss of both feet.

¹ Decree of lieutenant general, May 20, 1917, No. 876, Gazzetta Ufficiale, June 7, 1917.

17. All other organic or functional infirmities and lesions serious and permanent to the point of determining absolute incapacity for profitable work.

CATEGORY II.

1. Organic and incurable changes in both eyes, with such reduction of the visual acuteness as scarcely to permit counting of the fingers at the distance of ordinary short-distance vision.

2. Organic and incurable change in one eye producing absolute and permanent blindness with the visual acuteness of the other reduced from one-fiftieth to one-twenty-fifth of normal.

3. Organic, absolute and permanent deafness of both ears.

4. Destruction of the bones of the face, especially of the jawbones, and all other results of serious injuries to the face or to the mouth, such as to obstruct mastication, deglutition, or speech, or to cause notable deformities, notwithstanding prostheses.

5. Permanent, total or nearly total temporo-maxillary ankylosis.

6. Serious and permanent injuries to the respiratory apparatus, or of other organic apparatus and systems of the body, caused by the action of gas or noxious fumes.

7. All other organic lesions or affections of the larynx, trachea, or lungs, which cause serious and permanent injury to the respiratory functions.

8. Serious disease of the heart with evident symptoms, or serious and permanent affections of the pericardium.

9. Lesions and affections of the gastro-enteric canal and its associated glands, with serious and permanent loss of health.

10. Lesions and affections of the central nervous system (brain and spinal marrow), producing aphasia or other serious and permanent consequences, but not such as to reach the degree specified in numbers 5 and 6 of Category I.

11. Immobility of the head, in complete flexion or extension from an incurable cause, or the total and permanent rigidity or marked and permanent curvature of the spinal column.

12. Permanent paralysis, of central or peripheral origin, involving muscles or groups of muscles which regulate the essential functions of life, and from their character and duration judged incurable.

13. Cachexia and marasmus, resistant to cure.

14. Aneurism of the great arteries of the trunk or neck.

15. Serious and permanent lesions and affections of the hematopoietic organs.

16. Serious and permanent lesions and affections of the genito-urinary system.

17. Emasculation (complete loss of penis and testicles).

18. Artificial anus, incontinence of feces, fistula of the rectum and bladder, posterior urethral fistula, fistula of the liver, pancreas, spleen, stomach and intestines, if incurable.

19. Chronic arthritis, which through the number and importance of the joints affected has seriously diminished the functions of two or more limbs.

20. Loss of the right arm or forearm (disarticulation or amputation to the upper third of one or the other).

21. Total loss of six fingers, including both thumbs and index fingers.

22. Total loss of five fingers of the right hand and of two of the last four of the left.

23. Total loss of eight fingers, including or not including one of the thumbs.

24. Total loss of one thigh (disarticulation of the hip.)

25. Mediotarsal or subastralagoid amputation of both feet.

CATEGORY III.

1. Organic and incurable changes in both eyes, such as to reduce the visual acuteness of both eyes from one-fiftieth to one-twenty-fifth of normal.
2. Organic and incurable changes in one eye producing absolute and permanent blindness, with the visual acuteness of the other reduced from one-twenty-fifth to one-twelfth of normal.
3. Permanent and serious labyrinthine vertigo.
4. Loss of the tongue or its serious and permanent injury, such as to interfere markedly with speech and deglutition.
5. Loss of or serious and permanent disturbance of speech.
6. Loss of the left upper arm or forearm (disarticulation or amputation to the upper third of one or the other).
7. Total loss of the right hand, or total loss of its fingers.
8. Total loss of five fingers on the two hands, including both thumbs.
9. Total loss of five fingers of the left hand and of two of the last four of the right.
10. Total loss of the thumbs and index fingers of both hands.
11. Total loss of one thumb together with that of an index finger, and of four other fingers on the two hands, the other thumb remaining intact.
12. Total loss of both index fingers and of five other fingers on the two hands, excluding the thumbs.
13. Loss of one thigh to the upper third.
14. Complete ankylosis of the hip or knee, with extreme flexion.
15. Total or almost total loss of the penis.
16. Loss of both testicles.
17. Scars or other serious and permanent results of burns or of other wounds which notably impair the functions of limbs, organs, or important parts of the body.

CATEGORY IV.

1. Organic and incurable changes in both eyes, such as to reduce the visual acuteness of both eyes from one-twenty-fifth to one-twelfth of normal.
2. Organic and incurable change in one eye producing its absolute and permanent blindness, with the visual acuteness of the other eye reduced from one-twelfth to one-fourth of normal.
3. Total ankylosis of the right shoulder.
4. Loss of the left hand or total loss of its fingers.
5. Total loss of the last four fingers of the right hand or of its first three fingers.
6. Total loss of three fingers on the two hands, including both thumbs.
7. Total loss of one thumb and the two index fingers.
8. Total loss of one of the thumbs and of four other fingers on the two hands, excluding the index fingers and the other thumb.
9. Total loss of an index finger and of five or six other fingers on the two hands, excluding the thumbs.
10. Loss of one thigh to the middle third or the lower third.
11. Loss of one leg to the upper third.
12. Permanent results of fracture of principal bones (pseudo-arthroses, much deformed calluses which notably impair the function of a joint).

CATEGORY V.

1. Organic and incurable changes of both eyes, such as to reduce the visual acuteness of both from one-twelfth to one-fourth of normal.
2. Organic and incurable changes in one eye producing its absolute and permanent blindness, with incurable change in the peripheral vision of the other, under the

form of a concentric restriction of the visual field, so as to leave unimpaired only the central zone or the zone nearest the center, or to leave lacunae of such size as to occupy half of the visual field, or equivalent sectors.

3. Purulent affections of the middle ear (bilateral, or unilateral) of a permanent nature, accompanied by serious complications, or producing a diminution of the auditory functions such as to reduce the distance at which the speaking voice can be heard to 50 centimeters.

4. Total ankylosis of the left shoulder.

5. Total ankylosis of the right elbow, fully or almost fully extended.

6. Total loss of the thumb and index finger of the right hand.

7. Total loss of the last four fingers of the left hand or of the first three fingers.

8. Total loss of both thumbs.

9. Total loss of one thumb and of three other fingers on the two hands, excluding the index fingers and the other thumb.

10. Total loss of 1 index finger and 4 other fingers, from the 2 hands, excluding the thumbs and the other index finger.

11. Loss of the 2 last phalanges of 7 or 8 fingers of the 2 hands, excluding the thumbs.

12. Loss of the uncial phalanges of 9 or 10 fingers, or those of 8 fingers, including the thumbs.

13. Loss of 1 leg to the lower third, or of 1 foot, either by unilateral mediotarsal or subastragaloid amputation.

14. Tarsometatarsal amputation of both feet.

15. Total loss of the toes, or of 8 or 9 toes, including the great toes.

16. Diseases of the heart without manifest symptoms.

17. Extensive and evident arteriosclerosis.

18. Arterial aneurisms and arteriovenous aneurisms that do not noticeably interfere with the functions.

19. Tuberculosis of the lungs and all other tuberculous affections of any organs or apparatus, not sufficiently serious to be equivalent to the disabilities of any of the categories preceding.

20. Large visceral hernia that, judging by its extent, may be accompanied by serious and permanent complications.

21. Irreducible dislocation of one of the important articulations, which markedly impedes the function of the joint.

22. Epilepsy, the attacks of which are not frequent or severe enough to make it equivalent to the disabilities of any of the preceding categories.

CATEGORY VI.

1. Organic and incurable changes in one eye, producing its absolute and permanent blindness, with the visual acuteness of the other normal, or reduced from one-fourth to two-thirds of normal.

2. Organic and incurable changes in the peripheral vision in both eyes, under the form of the concentric restriction of the visual field to such a degree as to leave unimpaired only the central zone, or the zone nearest the center, or under the form of lacunae of such size as to occupy one-half of the visual field, or equivalent sectors.

3. Total ankylosis of the left elbow in complete or almost complete extension.

4. Total ankylosis of the right elbow in complete or almost complete flexion.

5. Total loss of the first 2 fingers of the left hand.

6. Total loss of 5 fingers on 2 hands, the last 3 of the one and 2 of the last three of the other.

7. Total loss of 1 of the thumbs, together with that of 2 other fingers on the 2 hands, excluding the index finger and the other thumb.

8. Total loss of the right thumb, together with the metacarpal bone corresponding, or together with the total loss of the three last fingers on the same hand.

9. Total loss of one of the index fingers and of three other fingers on the 2 hands, excluding the thumbs and the other index finger.

10. Loss of the 2 last phalanges of the last 4 fingers of the right hand or the loss of the last 2 phalanges of 5 or 6 fingers on the 2 hands, excluding the thumbs.

11. Loss of the uncial phalange of 6 or 7 fingers on the 2 hands, including that of 2 thumbs, or the loss of the uncial phalange of 8 fingers on 2 hands, including that of 1 thumb.

12. Total loss of 6 or 7 toes, including the great toes.

13. Total loss of 8 or 9 toes, including 1 great toe.

14. Nephritis, or its permanent consequences, resistant to cure.

15. Persistent muscular atrophy of peripheral origin and marked degree.

16. Muscular hernia, rupture of muscles or tendons, contractions, retractions, and adhesions of the muscles, tendons, or apo-neuroses, when by the altered function of the muscle they cause marked and permanent disturbances of important movements.

CATEGORY VII.

1. Organic and incurable changes in one eye—the other being intact, which reduce its visual acuteness from one-fiftieth to one-twelfth of normal.

2. Permanent bilateral impairment of hearing, unaccompanied by purulent affections of the middle ear, when the distance to which the speaking voice can be heard is reduced to 50 centimeters.

3. Deep and extensive injuries to the skull, with loss of the substance of the bone in its entire thickness, without functional disturbance of the brain.

4. Total ankylosis of the left elbow, in complete or almost complete flexion.

5. Complete ankylosis of the articulation (radiocarpal) of the right hand.

6. Total loss of 4 fingers of the 2 hands, excluding the thumbs and index fingers.

7. Total loss of the last 3 fingers of 1 hand.

8. Total loss of 2 index fingers.

9. Total loss of the right thumb.

10. Total loss of the left thumb, together with that of the metacarpal bone corresponding, or of one of the last 3 fingers of the same hand.

11. Total loss of 1 of the index fingers and of 2 other fingers on the 2 hands, excluding the thumb and the other index finger.

12. Loss of the two last phalanges of the index finger, and of those of three other fingers on the two hands, excluding those of the thumbs, or the loss of the same phalanges of the last four fingers of the left hand.

13. Loss of the uncial phalanges of three to five fingers on the two hands, including those of the thumbs.

14. Loss of the uncial phalanges of all the fingers of one hand, or the loss of the uncial phalanges of six or seven fingers on the two hands, including that of one thumb.

15. Loss of the uncial phalanges of seven or eight fingers on the two hands, excluding those of the thumbs.

16. Tarsometatarsal amputation of one foot.

17. Total loss of three to five toes, including the two great toes.

18. Total loss of six or seven toes, including one great toe, or of all or of the first four toes on one foot.

19. Total loss of seven or eight toes, excluding the great toes.

20. Total loss of the two great toes, including the metatarsal bones corresponding.

21. Loss of the two phalanges or the uncial phalange of the two great toes, together with the loss of the uncial phalanges of five to eight other toes.

22. Complete ankylosis (tibiotarsal) of both feet, without deviation and without marked impairment of walking.

23. Very large varicose veins, with many large knots, and their results (not merely the consequences of phlebitis), resistant to cure.

CATEGORY VIII.

1. Organic and incurable changes in one eye (the other being intact) which reduce its visual acuteness from $\frac{1}{2}$ to $\frac{1}{4}$ of normal.
2. Organic and incurable changes in the peripheral vision of one eye (the other eye having normal central and peripheral vision) under the form of concentric restriction of the visual field to such a degree as to leave unimpaired only the central zone or the zone nearest the center, or under the form of lacunæ of such size as to occupy $\frac{1}{2}$ of the visual field, or equivalent sectors.
3. Scars on the face or on any other part of the body which are extensive, painful, adherent, or retracted or easily ulcerating, except such as, by their seriousness, are equivalent to the infirmities of the preceding categories.
4. Results of lesions of the mouth, causing impairments of mastication, deglutition, and speech, together or separately, but not reaching the degree of Category II, No. 4 or Category III, Nos. 4 and 5.
5. Complete ankylosis (radiocarpal) of the articulation of the left hand.
6. Total loss of three fingers on the two hands, excluding thumbs and index fingers.
7. Total loss of one of the index fingers, and of another finger of the same hand, excluding the thumb.
8. Total loss of the left thumb.
9. Total loss of the last two phalanges of the index finger together with that of the last two phalanges of two other fingers of the same hand, excluding the thumb.
10. Total loss of four or five toes, including one great toe, or of the four last toes of one foot.
11. Total loss of five or six toes, excluding the great toes.
12. Loss of one great toe or of its uncial phalange together with the loss of the uncial phalange of six or eight other toes.
13. Complete tibiotarsal ankylosis of one foot, without deviation and without marked impairment of walking.
14. Marked contraction (not less than 6 centimeters) of a lower limb.

CATEGORY IX.

1. Organic and incurable changes in both eyes, which reduce their visual acuteness from $\frac{1}{2}$ to $\frac{1}{4}$ of normal.
2. Loss of one of the testicles.
3. Absolute and permanent unilateral deafness.
4. Total loss of two of the last three fingers on one hand, or between the two hands.
5. Total loss of one of the index fingers, accompanied or not by the loss of one of the last three fingers of the other hand.
6. Loss of the last two phalanges of one of the index fingers, or of those of two other fingers on the two hands, excluding those of the thumbs and of the other index finger, or the loss of the same phalanges of the three last fingers of one hand, or of four on the two hands.
7. Loss of the two last phalanges of the two index fingers.
8. Loss of the uncial phalanges of the two thumbs.
9. Loss of the uncial phalange of one thumb, together with that of the uncial phalange of another finger of the hands.
10. Loss of the uncial phalanges of five or six fingers on the two hands, excluding the thumbs, or of the same phalanges of four fingers on the two hands, including one index finger.
11. Loss of one great toe and the metatarsal bone corresponding.
12. The total loss of two or three toes on one or on the two feet, including one great toe (the corresponding metatarsal bone being intact), or the total loss of four toes, excluding the great toes.

13. Total loss of the two great toes, accompanied or not by loss of the uncial phalanges of one or two toes of the same or of the other foot.

14. Loss of one of the great toes, or of the uncial phalanges of the two great toes, together with the loss of the uncial phalanges of three or four other toes.

15. Total loss of the uncial phalanges of seven or eight toes, excluding the great toes.

16. Neuroses, resistant to cure, except those that by their seriousness are equivalent to the infirmities of the preceding categories.

CATEGORY X.

1. Cicatricial stenosis of the external auricular canal, permanent, bilateral or unilateral, or the total loss, bilateral or unilateral, of the auricle, or other permanent lesions of the auricle which constitute marked deformity.

2. Total loss of a little finger.

3. Total loss of the two last phalanges of two fingers, on one or both hands, excluding those of the thumbs and index fingers.

4. Loss of the uncial phalange of one thumb.

5. Loss of the uncial phalanges of the index fingers, or the loss of the uncial phalanges of four fingers on the two hands, excluding the thumbs and index fingers.

6. Loss of the uncial phalanges of two or three of the last four fingers on the two hands, including, or not including, that of an index finger.

7. Total loss of two or three toes on the two feet, excluding the great toes.

8. Total loss of one of the great toes, or of the uncial phalanges of both great toes, accompanied or not accompanied by the loss of the uncial phalanges of one or two others of the four last toes.

9. Loss of the two phalanges of a great toe or of its uncial phalange, together with the loss of the uncial phalanges of four or five other toes on the two feet.

10. Total loss of the uncial phalanges of five or six toes, excluding the great toes.

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NETHERLANDS.¹

INTRODUCTION.

Disability and service pensions and separation allowances are features of the Dutch defense acts, as are also pensions to the survivors of deceased and pensioned soldiers and sailors of all ranks. The present separation allowance is 2 florins (80.4 cents) a day maximum for the period of the war; it is based on the earning capacity of the enlisted man, and is not necessarily related to the number of dependents. Disability pensions are for loss of military capacity as well as for loss of civil earning capacity; they vary with the grade of rank and are noncontributory, being paid from State funds. Pensions to survivors are, on the other hand, partially contributory, the assessments upon those likely to have dependents being in proportion to the pension of the particular grade of rank in case of the enlisted man in the Army and of the wage class in the Navy. (See page 188.) Widows and children only are specifically mentioned as dependents; the amounts paid them are in proportion to their number; and to entitle them to a pension the deceased must have died in discharge of official duties or from wounds in war or service, and within a year of the injury causing death.

Separate laws, not discussed in this summary, are applicable to men in the colonial service and to their widows and children.

SEPARATION ALLOWANCES.

Separation allowances are paid to families of those called into training in the reserves and to volunteers in the militia; as wage earners with families dependent upon them are not drafted into the militia there is no question of separation allowances for drafted men. The allowances are in the nature of bonuses to the family of the soldier or sailor to compensate for his loss of earnings. The maximum fixed by law is the same for each family, but the minister of war exercises discretion below that limit in fixing the amounts, having regard to the differences in the cost of living in different localities and the earning capacity of the man before enlistment. Thus it is provided in the laws that the amount to any family shall not exceed the difference between the earnings contributed by the man to the support of the family and the amount necessary for his own support. The allowances are not a matter of right, automatically payable, but rest upon the fact of dependence and need. As a matter of fact the maximums fixed by law have been paid only in a small proportion of the cases. It should be noted that the amounts have been increased since mobilization upon the outbreak of the European war. Prior to the war the maximum ranged from 1 florin (40.2 cents) per day to 2 florins (80.4 cents), depending on

¹ The material on the Netherlands was prepared by Mr. Leifur Magnusson.

the class of service; but for the period of the war the maximum has recently been fixed at 2 florins (80.4 cents) a day for all classes of service.¹

The separation allowances are administered by the war and navy departments each in their own sphere; but direct payment takes place through the mayors of communes. The laws being general in their terms, numerous decrees and circulars of the departments define the scope of the allowances.

While the mayors make the payments of allowances as having the best access to first-hand information about the dependents in any case, it was found soon after the war broke out that dissimilarities of administration were creeping in. The minister of war was interpellated on the subject in Parliament on December 15, 1914,² and then promised to use the services of the recently organized committees on relief in the different Provinces; two weeks later he directed that consideration should be given to differences in the cost of living in different cities in the fixing of the amounts paid.³ On March 12, 1915, the minister of marine also directed the relief committees to pay the allowances to the dependents of sailors.⁴

The separation allowances have been less than the maxima usually fixed by law. In Amsterdam, for example, in October, 1915, the average weekly allowance per man granted to 2,593 mobilized men was 8.47 florins (\$3.40); the probable weekly earnings could be estimated at 18.90 florins (\$7.60),⁵ a difference of 10.43 florins (\$4.20) between the amount of the possible earnings and the separation allowance.⁶

At the beginning of the war private relief was necessary to supplement the allowances.⁷ This relief was supplied by the Royal National Relief Committee (Kon. Nationaal Steuncomité), organized on the initiative of the Queen, August 6, 1914,⁸ and composed of representatives of various social reform and labor organizations. It was created to coordinate private relief work, and is itself a voluntary privately supported charitable association, although subsidized⁹ from time to time by the Government; its secretary is a minister of state.

Relief work of a general character and affecting all wage earners has been much extended during mobilization. The national and local councils of labor—which are official bodies—have urged employers to pay wages to those of their employees who are called into service,¹⁰ and the Dutch federation of brewers among others has passed a resolution

¹ Law of June 27, 1916, Staatsblad No. 293.

² Maandschrift van het Centraal Bureau voor de Statistiek, The Hague, 1915, vol. 10, p. d.

³ Idem, p. 117.

⁴ Idem, p. 405.

⁵ Kon. Nationaal Steuncomité 1914: Voornaamste bescheiden, The Hague, 1915, vol. 7, p. 45.

⁶ Idem, 1917, vol. 9, pp. 55, 56.

⁷ Maandschrift van het Centraal Bureau voor de Statistiek, The Hague, 1914, vol. 9, p. 626.

⁸ Idem, 1914, vol. 9, pp. 844, 845.

⁹ Idem, 1914, vol. 9, p. 661.

to pay its men in service who hold no commission three-fourths pay less any amounts the Government may contribute. Wages of State employees called to arms have been continued for not exceeding eight and one-half months a year while in service.¹ Other instances may be cited, for a cursory examination of the journal of the Dutch statistical office (*Maandschrift van het Centraal Bureau voor de Statistiek*) shows among other things that since the outbreak of the war unemployment benefits have been extended in their scope; that cost of living bonuses have been paid to families in need; that the State on occasion has fixed maximum prices of certain of the more important necessities; and that export embargoes have been invoked, all in the attempt to offset the burden of high prices falling upon the wage earner.

Finally, wives of those in the militia who are themselves wage earners will be protected by compulsory sickness insurance, which grants benefits for care in cases of confinement or of miscarriage. This law, enacted June 5, 1913 (*Staatsblad* 203), but not yet in force so far as known, will grant benefits of 70 per cent of the daily wages, beginning with the first day of illness and cover a period not exceeding six months. Benefits are refused, however, if the pregnancy occurred earlier than six months before insurance was taken out, or if the miscarriage took place within six months of the beginning of the insurance. The benefits are raised by contributions, half from the employer and half from the employee; the half share of each wage earner insured ranging from 0.25 florins (10.1 cents) per month to 2 florins (80.4 cents) per month, according to his earnings. The highest class of wage earners included under this system of benefits receive 3.50 florins (\$1.41) a day; the lowest wage recognized is 70 centimes (28.14 cents) a day, and those below that grade may be exempted from taking out the insurance.

RETIREMENT PENSIONS AND PENSIONS FOR DISABILITY.²

Disability and long-service pensions are paid to all officers and enlisted personnel in both Army and Navy for wounds or injuries in service involving loss of military capacity or earning power or for continued years of service. The basic pension acts at present in force were passed on June 9, 1902, and have since been frequently amended; they were codified in a decree of May 10, 1915 (*Staatsblad* No. 217). The provisions of an earlier act of March 21, 1896 (*Staatsblad* No. 50), are still in effect as regards the organization of the pension boards. The provisions of this pension legislation covering both the land and sea forces are quite identical in terms, having been enacted and amended

¹ *Maandschrift van het Centraal Bureau voor de Statistiek*, The Hague, 1915, vol. 10, p. 1019.

² See Schedule 61, on annual pensions to officers and their widows and children, p. 190, and Schedule 62, p. 192, on annual pensions to noncommissioned officers and other enlisted men.

concurrently from time to time. The laws of 1902 cover, besides disability and long service of enlisted men and officers, also the matter of survivors' pensions to the widows and children of officers, while the laws of June 29, 1909 (Staatsblad Nos. 202, 203), provide for the establishment of a special fund for the payment of pensions to the widows and children of voluntary enlisted men. There is no problem as to the payment of pensions to the survivors of drafted men, because only those having no dependents are drafted.

Pensions for length of service are granted to officers of the line in both Army and Navy after 40 years of service; to officers in the Hospital Corps after 30 years; and to all enlisted men after 30 years, provided in all cases that officers have reached the age of 50 and enlisted men the age of 45. Partial pensions for fewer years of service are also granted as shown in the appended tables.

Disability pensions are paid for loss of military capacity resulting from wounds in war or from discharge of official duties while training; and for disability for service from other causes not voluntarily brought about or the result of gross carelessness.

A "full pension" is fixed for each grade of rank, which pension becomes the basis for computing the amount of the pension for each degree of disability or loss of earning capacity; this basic pension is increased by one-half its amount for permanent total loss of earning capacity accompanied by the loss of two or more limbs or both eyes; and by one-fourth for permanent total loss of earning capacity coupled with the loss of one limb. It becomes the actual amount paid for total permanent loss of earning capacity, and for completion of the required years of service upon which service pensions are conditioned. Similar amounts, as above for permanent total disability, are paid for temporary total disability as long as it lasts. The amount of the basic pension varies from 240 florins (\$96.48) a year for the lowest grade in both Army and Navy up to 600 florins (\$241.20) for the highest grade of noncommissioned officer. The highest pension in either the Army or the Navy is 3,000 florins (\$1,206) a year. The varying amounts for each grade of rank are set forth in the accompanying tables.

Three-fourths of the basic pension is paid for partial loss of earning capacity; but this amount may be increased according to the years of service, amounting, in the case of officers to one-fortieth of the basic pension multiplied by the years of service; and one-thirtieth in the case of enlisted men.

The service pensions vary with the years of service, but in no case are they less than one-half of the basic pension of the grade in question.

The pension is granted to officers as of the rank held for the two years next preceding retirement; but if the particular rank has not been filled for two consecutive years, then for the rank prior thereto. If, however, the rank has been filled for six consecutive years prior

to retirement a bonus is paid (1) to junior lieutenants of the first class and captains in the Navy and to captains in the Army, equal to one-sixth of their basic pension, and (2) to all other officers in both Army and Navy ranging from the above grades down to that of corporal, one-tenth of the basic pension. Furthermore, if the rank for which the pension is granted has been filled for more than six years, the first group named above are allowed an additional pension for each year in excess of six—but not reckoning more than 12 years in the grade—of one-thirty-sixth of their basic pension, and those in the second group one-sixtieth.

All enlisted men in either Army or Navy who have been in the service 35 years are granted a supplementary pension of 10 per cent of their basic pension, and after 40 years of service, 20 per cent.

In counting years of service credit is given for service in different branches of the defense force, for service in certain civil employments on public works and fortifications, and in the colonial service. In the last-named instance double time is reckoned. Service before the sixteenth year of age is not calculated, nor is time spent on leave or release from official duties. Where double time is counted certain flat increases in pensions are allowed; for each year of service counted double: 75 florins (\$30.15) for commissioned officers; 28 florins (\$11.26) for engineers and assistant engineers in the Navy; 25 florins (\$10.05) for noncommissioned officers other than corporal; and 15 florins (\$6.03) for all other enlisted men.

Among other provisions defining pension rights may be mentioned that which directs the loss of pension for dishonorable conduct or discharge; and provision for a temporary pension in certain instances.

PENSIONS TO WIDOWS AND CHILDREN.¹

Widows and children of deceased soldiers and sailors and officers, and of those retired on a pension and dying out of the service, are entitled to a pension if death has been the result of wounds in war or injuries in service or discharge of official duties, provided death occurs within a year of the happening of the injury which caused it. No provision is made for ascendants or collaterals as dependents. Those not entitled to a pension are (1) widows or children provided for from other pension funds, as for instance those of men in the colonial service; (2) widows married to a discharged officer or soldier or sailor after his fifty-sixth year; and (3) legitimate or legitimated children of a marriage contracted after the fifty-sixth year of age of the discharged or retired party; (4) widows who have married a discharged man or retired officer; (5) illegitimate children are by implication excluded from benefits as are (6) children over 18 years of age and (7) those younger if married.

¹ See Schedule 63, p. 194, on annual pensions to widows and children of noncommissioned officers and other enlisted men.

The amounts of the pensions for widows and children of commissioned officers are flat amounts graded according to the rank of the deceased and regardless of the number of dependents. The highest survivors' pension in either the Army or Navy is 1,150 florins (\$462.30), paid to the widows and children of a general and a vice admiral.

For enlisted men in the Army the widow's pension is never in excess of one-half of the basic pension of the grade of rank of the deceased; but for the purposes of this calculation the basic pension of the highest class of enlisted man is never reckoned in excess of 440 florins (\$176.88), so that the maximum pension for the widow of an enlisted man can not exceed 220 florins (\$88.44) a year. The pensions of the widows and children cumulate, and there is added to the widow's pension certain proportions of the basic pension of the deceased subject to the same maximum limitation as above. These proportions for the children increase with each child up to five. They are shown in the table following together with the actual amounts which would be paid to each specified number of children of a deceased father entitled to the maximum pension of an enlisted man, or 440 florins (\$176.88) as already explained.

Proportion of basic pension and amount of pension of each specified number of children of the highest rank of enlisted man.

Number of children.	Proportion of maximum basic pension, 440 florins, (\$176.88).	Amount of annual pension.
1 child	8/40	88 florins (\$35.38).
2 children	11/40	121 florins (\$48.64).
3 children	14/40	154 florins (\$61.91).
4 children	17/40	187 florins (\$75.17).
5 or more children	20/40	220 florins (\$88.44).

If the widow dies or remarries, or if the children are completely orphaned, the proportion of the pension of the grade or rank of the deceased father to which the children would be entitled would be as follows:

Proportion of basic pension and amount of pension paid to each specified number of fully orphaned children of the highest rank of enlisted man.

Number of children.	Proportion of maximum basic pension, 440 florins (\$176.88).	Amount of annual pension.
1 child	10/40	110 florins (\$44.22).
2 children	15/40	165 florins (\$66.33).
3 or more children	20/40	220 florins (\$88.44).

The examples above are for the maximum possible pension which survivors of enlisted personnel can receive. As shown by the appended tables the basic pensions differ between the various grades of rank, being in some cases as low as 240 florins (\$96.48), in which case the widow's pension would be 120 florins (\$48.24) a year.

The amounts of the basic pensions for different ranks of the enlisted personnel in the Navy for the purpose of calculating survivors' pensions are not fixed according to the grade of rank but according to the wage class of the enlisted man. The different classes grouped according to monthly wages and the amounts of the corresponding basic annual pensions are as follows:

I. 65 florins (\$26.13) and over, 440 florins (\$176.88).

II. 55 florins (\$22.11) but less than 65 florins (\$26.13), 400 florins (\$160.80).

III. 38 florins (\$15.28) but less than 55 florins (\$22.11), 360 florins (\$144.72).

IV. 28 florins (\$11.26) but less than 38 florins (\$15.28), 250 florins (\$100.50).

V. Less than 28 florins (\$11.26), 200 florins (\$80.40).

The pensions of widows and children form the same proportion of the above basic pensions of the different wage classes as they form of the basic pension of the grade of rank in the Army; but here the classification is by wages rather than rank. The most probable reason for this change of basis is that in the Navy so many of the enlisted men perform occupations common to civil life, and distinctions thus become occupational rather than military.

The ranks probably included in the first wage class above are warrant officer, sergeant major, and engineer major; in class II,engineman, sergeant, and warrant engineman; in class III, fireman of first grade, and corporal; in class IV, fireman, oiler, and seaman; while in class V, are included probably only the lowest rank occupations, apprentices, etc.

MISCELLANEOUS PROVISIONS.

As already noted pensions for disability and long service for both officers and enlisted personnel are noncontributory; pensions to survivors of officers are likewise noncontributory; while those for survivors of enlisted personnel are partially contributory. Parliamentary appropriations supply any deficiencies.

All enlisted men in the Army and Navy who are likely to have dependents as claimants to a pension are required to contribute 6/100 a year of the basic pension of their grade of rank in the Army or wage class in the Navy, but not exceeding 26.40 florins (\$10.61) a year; all pensioned soldiers or sailors contribute 3/100 a year, but not exceeding 13.20 florins (\$5.31) a year.

All pensions are forfeited if not claimed within five years; they are payable quarterly. They are not subject to seizure for debt other than debts for necessities, nor can they be assigned. No provision is made for lump-sum payments.

The three schedules appended set forth the details of this pension legislation.

REFERENCES.

Staatsblad van het Koninkrijk der Nederlanden, 1896, 1901, 1902, 1909, 1915, 1916, 1917. The Hague, 1897-1917.

Maandschrift van het Centraal Bureau voor de Statistiek, 1910 to date. The Hague, 1910 to date.

Staatsalmanak voor het Koninkrijk der Nederlanden, 1915. The Hague, 1914.

Koninklijk Nationaal Steuncomité, 1914. Voornaamste Bescheiden. The Hague, 1915-1917. Vols. 5, 7, 8, 9.

SCHEDULE 62.—Netherlands. Annual disability and service pensions to noncommissioned officers and other enlisted men.

[Source: Laws of June 9, 1902, Statutabled 87, 90, and subsequent, amendments as codified in the decree of May 10, 1915 (Statutabled, 217).]

[Amounts outside of parentheses are in florins; amounts inside of parentheses are in dollars.]

Branch of service and grade of rank.		Full p	of	of	of
Army.	Navy.				
Warrant officer.....	Warrant officer.....	50	(2)		
Sergeant major.....	Sergeant major.....	50	(2)		
Sergeant.....	Sergeant; warrant ad- gineer.	50	(1)		
Corporal.....	Corporal; warrant en- gineer.	45	(1)		
Hospital orderly.....	Seaman, first and sec- ond class; warrant engineer.	45	(1)		
Private.....	Seaman, third class.....	45	(1)		
Constabulary: Warrant officer.....		50			
Sergeant major.....	Engineer.....	50	(2)		
Sergeant.....	Engineer major.....	50	(2)		
Constabulary, first and second class.		50	(2)	(201.00)	stomed officer paid for rank held for two years prior to discharge, but if not held two years, then rank prior thereto.
Constabulary, third class.		45	(1)	450	
		45	(1)	(180.90)	
				240	
				(96.48)	

	400 (100.80)	300 (201.00)	200 (130.60)	100 (65.30)	of service in excess of 10 years.	400 (100.80)	300 (201.00)	200 (130.60)	100 (65.30)	tion of enlist- ment period, refusal of minis- ter of war to re- new same, pro- vided charges of dishonorable con- duct are not filed. No pension less than one-half of basic pension.	5. Noncommissioned officers above corporal holding rank of discharge 6 years get lump sum bonus of one-sixth of basic pension; others one-tenth; for each year additional up to 12 in rank former get additional pension of one-thirty-sixth of base, latter one-sixtieth. Grades of soldier and seer- man after 35 years in service 10 per cent of base addi- tional, and after 40 years, 30 per cent each year.
Engineman (sergeant).....	400 (100.80)	300 (201.00)	200 (130.60)	100 (65.30)	400 (100.80)	300 (201.00)	200 (130.60)	100 (65.30)	400 (100.80)	45	
Engineman (corporal).....	300 (144.72)	200 (130.60)	100 (65.30)	50 (21.7.05)	300 (144.72)	200 (130.60)	100 (65.30)	50 (21.7.05)	300 (144.72)	45	
Engineman (corporal, second class).....	240 (136.08)	180 (170.55)	120 (120.60)	60 (205.02)	240 (136.08)	180 (170.55)	120 (120.60)	60 (205.02)	240 (136.08)	45	
Fireman (corporal).....	240 (136.08)	180 (170.55)	120 (120.60)	60 (205.02)	240 (136.08)	180 (170.55)	120 (120.60)	60 (205.02)	240 (136.08)	45	
Fireman oiler.....	200 (120.60)	150 (150.75)	100 (120.60)	50 (180.90)	200 (120.60)	150 (150.75)	100 (120.60)	50 (180.90)	200 (120.60)	45	
Fireman, first class.....	300 (120.60)	200 (150.75)	100 (120.60)	50 (180.90)	300 (120.60)	200 (150.75)	100 (120.60)	50 (180.90)	300 (120.60)	45	
Fireman, second class.....	240 (112.56)	180 (140.70)	120 (120.60)	60 (168.84)	240 (112.56)	180 (140.70)	120 (120.60)	60 (168.84)	240 (112.56)	45	
Fireman, third class.....	240 (96.48)	180 (120.60)	120 (120.60)	60 (144.72)	240 (96.48)	180 (120.60)	120 (120.60)	60 (144.72)	240 (96.48)	45	
Assistant fireman.....	240 (96.48)	180 (120.60)	120 (120.60)	60 (144.72)	240 (96.48)	180 (120.60)	120 (120.60)	60 (144.72)	240 (96.48)	45	
Apprentice fireman.....	240 (96.48)	180 (120.60)	120 (120.60)	60 (144.72)	240 (96.48)	180 (120.60)	120 (120.60)	60 (144.72)	240 (96.48)	45	

1 All pensions are calculated

2 Or incapacity as defined

3 Thirty years of service re

4 Stipulations 1 and 2 apply

on, except when coupled with slight disability, in which case general stipulation 3 applies.
only; 3, 4, and 5 apply also to service pensions.

SCHEDULE 62.—*Netherlands. Annual disability and service pensions to noncommissioned officers and other enlisted men.*

[Source: Laws of June 9, 1902, Statuteblad 87, 90, and subsequent, amendments as codified in the decree of May 10, 1915 (Statuteblad, 217).]

[Amounts outside of parentheses are in florins; amounts inside of parentheses are in dollars.]

Branch of service and grade of rank.		is.	
Army.	Navy.	Partial disability.	Partial disability.
Warrant officer.....	Warrant officer.....	600 (241.20)	600 (241.20)
Sergeant major.....	Sergeant major.....	500 (201.00)	500 (201.00)
Sergeant.....	Sergeant; warrant en- gineer.....	400 (160.80)	400 (160.80)
Corporal.....	Corporal; warrant en- gineer.....	300 (120.60)	300 (120.60)
Hospital orderly.....	Seaman, first and sec- ond class; warrant engineer.....	280 (112.50)	280 (112.50)
Private.....	Seaman, third class.....	240 (96.48)	240 (96.48)
Constabulary. Warrant officer.....	.....	675 (271.35)	675 (271.35)
Sergeant major.....	Engineer.....	600 (241.20)	600 (241.20)
Sergeant.....	Engineer major.....	500 (201.00)	500 (201.00)
Constabulary, first and second class. Constabulary, third class.....	.....	450 (180.90)	450 (180.90)
		240 (96.48)	240 (96.48)

1. Wounds or disability re-
sulting in time of war or in
discharge of duty; or
2. Other injuries in service
not caused voluntarily or
the result of gross care-
lessness.
3.
4. Pension to noncommen-
dation officer paid for rank
held for two years prior to
discharge, but if not held
two years, then rank prior
thereto.

Three-fourths
of basic pen-
sion in -
creased by
one-thirtieth
for each year

ary duties or,
upon termina-

Engineer (sergeant).....	400 (100.80)	600 (241.50)	800 (201.00)	400 (100.80)	of service in excess of 10 years.	80 (100.80)	400 (100.80)	tion of enlist- ment period, refusal of minis- ter of war to re- new same, pro- vided charges of disbonora ble con- duct are not filed. No pension less than one-half of basic pension.	15
Engineer (corporal).....	360 (144.72)	540 (217.00)	450 (180.90)	360 (144.72)		45 (144.72)	360 (144.72)		
Engineer (corporal, second class).....	340 (136.68)	510 (206.02)	425 (170.85)	340 (136.68)		45 (136.68)	340 (136.68)		
Fireman (corporal).....	340 (136.68)	510 (206.02)	425 (170.85)	340 (136.68)		45 (136.68)	340 (136.68)		
Fireman oiler.....	300 (120.60)	450 (180.90)	375 (150.75)	300 (120.60)		45 (120.60)	300 (120.60)		
Fireman, first class.....	300 (120.60)	450 (180.90)	375 (150.75)	300 (120.60)		45 (120.60)	300 (120.60)		
Fireman, second class.....	280 (112.50)	420 (168.84)	350 (140.70)	280 (112.50)		45 (112.50)	280 (112.50)		
Fireman, third class.....	240 (96.48)	360 (144.72)	300 (120.60)	240 (96.48)		45 (96.48)	240 (96.48)		
Assistant fireman.....	240 (96.48)	360 (144.72)	300 (120.60)	240 (96.48)		45 (96.48)	240 (96.48)		
Apprentice fireman.....	240 (96.48)	360 (144.72)	300 (120.60)	240 (96.48)		45 (96.48)	240 (96.48)		

1 All pensions are calculated

2 Or incapacity as defined

3 Thirty years of service re

4 Stipulations 1 and 2 appl

5, except when coupled with slight disability, in which case general stipulation 3 applies.
only; 3, 4, and 5 apply also to service pensions.

SCHEDULE 63.—*Netherlands. Annual pensions to widows and children of noncommissioned officers and other enlisted men.*

[Source: Laws of June 9, 1902 (Staatsblad 87, 90) and subsequent amendments as codified in the decree of May 10, 1915 (Staatsblad, 217); laws of June 29, 1909 (Staatsblad, 202, 203).]

[Amounts outside of parentheses are in florins; amounts inside of parentheses are in dollars.]

Branch of service and grade of deceased.	Basic pension of rank. ¹	Widows and children. ²						Full orphans and children of remarried widow.			General stipulations.
		Widow.	One child.	Two chil-dren.	Three chil-dren.	Four chil-dren.	Five or more chil-dren.	One child.	Two chil-dren.	Three or more chil-dren.	
		$\frac{1}{2}$ of basic pension.	$\frac{1}{2}$ of basic pension.	$\frac{1}{2}$ of basic pension.	$\frac{1}{2}$ of basic pension.	$\frac{1}{2}$ of basic pension.	$\frac{1}{2}$ of basic pension.	$\frac{1}{2}$ of basic pension.	$\frac{1}{2}$ of basic pension.	$\frac{1}{2}$ of basic pension.	
Army (ranks):	600 (241.20)	220 (88.44)	88 (35.38)	121 (48.64)	154 (61.91)	187 (75.17)	220 (88.44)	110 (44.22)	165 (66.33)	220 (88.44)	1. Death of husband in time of war or while in discharge of official duties. 2. Occurrence of death within one year of cause thereof. 3. Forfeiture of pension upon remarriage of widow. 4. Termination of pension to children at completed eighteenth year, or upon marriage, if younger.
Warrant officer.....											
Sergeant major.....	500 (201.00)	220 (88.44)	88 (35.38)	121 (48.64)	154 (61.91)	187 (75.17)	220 (88.44)	110 (44.22)	165 (66.33)	220 (88.44)	
Sergeant.....	400 (160.80)	200 (80.40)	80 (32.16)	110 (44.22)	140 (56.28)	170 (68.34)	200 (80.40)	100 (40.20)	150 (60.30)	200 (80.40)	
Corporal.....	300 (120.60)	150 (60.30)	60 (24.12)	83 (33.37)	105 (42.21)	128 (51.46)	150 (60.30)	75 (30.15)	113 (45.43)	150 (60.30)	
Hospital orderly.....	280 (112.56)	140 (56.28)	56 (22.51)	77 (30.95)	98 (39.40)	119 (47.84)	140 (56.28)	70 (28.14)	105 (42.21)	140 (56.28)	
Private.....	240 (96.48)	120 (48.24)	48 (19.30)	66 (26.53)	84 (33.77)	102 (41.00)	120 (48.24)	60 (24.12)	90 (36.18)	120 (48.24)	
Constabulary (ranks):											
Warrant officer.....	675 (271.35)	220 (88.44)	88 (35.38)	121 (48.64)	154 (61.91)	187 (75.17)	220 (88.44)	110 (44.22)	165 (66.33)	220 (88.44)	
Sergeant major.....	600 (241.20)	220 (88.44)	88 (35.38)	121 (48.64)	154 (61.91)	187 (75.17)	220 (88.44)	110 (44.22)	165 (66.33)	220 (88.44)	
Sergeant.....	500 (201.00)	220 (88.44)	88 (35.38)	121 (48.64)	154 (61.91)	187 (75.17)	220 (88.44)	110 (44.22)	165 (66.33)	220 (88.44)	
Constabulary, first and second class...	450 (180.90)	220 (88.44)	88 (35.38)	121 (48.64)	154 (61.91)	187 (75.17)	220 (88.44)	110 (44.22)	165 (66.33)	220 (88.44)	
Constabulary, third class.....	240 (96.48)	120 (48.24)	48 (19.30)	66 (26.53)	84 (33.77)	102 (41.00)	120 (48.24)	60 (24.12)	90 (36.18)	120 (48.24)	
Navy (monthly pay classes):											
1. 65 florins (\$26.13) and over (war-rant officers, sergeant major, engineer major).....	440 (176.88)	220 (88.44)	88 (35.38)	121 (48.64)	154 (61.91)	187 (75.17)	220 (88.44)	110 (44.22)	165 (66.33)	220 (88.44)	

II. 55 florins (\$22.11) but less than 65 florins (\$26.13), including engineers, sergeants, and war-rant engineer.	400 (160.80)	200 (80.40)	80 (32.16)	110 (44.22)	140 (56.28)	170 (68.34)	200 (80.40)	100 (40.20)	150 (60.30)	200 (80.40)
III. 38 florins (\$15.28) but less than 55 florins (\$22.11), including firemen (first) and ranks of corporal.	360 (144.72)	180 (72.36)	72 (28.94)	99 (39.80)	126 (50.65)	153 (61.51)	180 (72.36)	90 (36.18)	135 (54.27)	180 (72.36)
IV. 28 florins (\$11.25) but less than 38 florins (\$15.28), including firemen, oilers, and seamen.	250 (100.50)	125 (50.25)	50 (20.10)	69 (27.74)	88 (35.38)	107 (43.01)	125 (50.25)	63 (25.32)	94 (37.79)	125 (50.25)
V. Less than 28 florins (\$11.25), including apprentices and lowest-rank occupations.	200 (80.40)	100 (40.20)	40 (16.08)	55 (22.11)	70 (28.14)	85 (34.17)	100 (40.20)	50 (20.10)	75 (30.15)	100 (40.20)

¹ On this basic pension of the grade of rank of the deceased are computed the amounts of the pensions of the widows and children; but for purpose of calculation the basic pension never exceeds 440 florins (\$176.88).

² The pension of the widow and that of the children cumulate if both survive.

RUSSIA.¹SEPARATION ALLOWANCES.²

The separation allowance to an officer's family consists of (1) assigned pay—such part of the officer's salary as he himself may determine, above a minimum fixed by the Government at one-third; (2) ten rubles (\$5.15) per month for servant's wages; (3) either an apartment or rent allowance, varying in amount from 1,692 rubles (\$870.69) to 102 rubles (\$52.49) according to the rank and duties of officer; and (4) a gratuity and traveling expenses in case the family is compelled by military circumstances to leave their place of residence.

In case the officer is taken prisoner one-half of his salary is paid to his family.

In the absence of wife and children, families consisting of aged parents, brothers, and sisters, if they are dependent on the officer, are entitled to the allowance.

The separation allowance is paid at the end of each month, either by the Army unit to which the officer belongs, or, in case this is impracticable, by the local military authorities.

The separation allowances to families of enlisted men, as provided by the law of June 25, 1912,³ are regulated as follows: Each person receives each month the cash value of the following products: 68 pounds of flour; 10 pounds of grits; 4 pounds of salt; and 1 pound of vegetable oil.⁴ A child under 5 years of age receives one-half the amount. Apparently no allowance is paid to the families of men serving their required term.⁵

¹ The Russian material has been prepared by Miss Anna Kalet.

² The value of the ruble used in this report is that of normal times, namely, \$0.5146. On July 1, 1917, the exchange value of the ruble had fallen to \$0.2325. Allowances and pensions to officers and enlisted men in the Russian Army and Navy and to their families are based on the military code of 1869, edition of 1910; on the orders of August 20, September 4, November 23, and November 27, 1914; on the laws of June 23 and 25, 1912; on the temporary orders of August 17 and November 17, 1914; on the laws of November 3, 1914, and on a law of 1916, printed in the Collection of Government Laws and Regulations (*Sobranie Uzakoniennii Rasporiazhenii Pravitelstva*) July 16, 1916. According to information from the United States Department of State the new Russian Government considers the present provision for soldiers' families unsatisfactory and is preparing a simplified and more liberal system which, it is hoped, will take effect in the autumn of 1917.

³ *Svod Zakonov Rossiiskoi Imperii* (Codified Laws of Russia), edited by Dobrovolskii, St. Petersburg, 1913, Vol. III, supplement 56, p. 2714 ff.

⁴ The measure used is the Russian pound, which equals nine-tenths of a pound avoirdupois.

⁵ The monthly pay of an enlisted man (lowest grade) in time of war is 75 kopeks (39 cents) and for a non-commissioned officer (highest grade), 9 rubles (\$4.63).

SCHEDULE 64.—*Russia. Separation allowances to families of enlisted men.*¹

[Russian pounds outside parentheses; American pounds inside parentheses.]

Recipients.		Amount.	Remarks.
Military persons.	Members of families entitled.		
Enlisted men in Army and Navy: 1. Reservists called to war service. 2. Soldiers compelled on account of war to remain in service after completing required term. 3. Members of the militia and volunteers in active service.	Wife and children (legitimate only); parents, grandparents; such as were previously supported by soldier.	A monetary allowance per capita per month equal to the cost of the following provisions: 68 (61.2) pounds flour, 10 (9) pounds grits, 4 (3.6) pounds salt, 1 (.9) pound vegetable oil. Each child under 5 years old receives half of this allowance.	Children over 17 receive the allowance only if they are incapacitated; married daughters receive no allowance in any case. The cost of these products is determined for each locality.

¹ Summary based on law of June 25, 1912, reprinted in *Svod Zakonov Rossiiskoi Imperii* (Codified Laws of Russia), edited by Dobrovolskii, St. Petersburg, 1913, Vol. III, supplement 56, p. 2714 ff; orders of Aug. 9, Dec. 10, and 22, 1914, reprinted in G. V. Severin, *Rananye Ofitseryi i Nizhnie Chiny*, Petrograd, 1914, pp. 119, 120, 177.

The following members of the family are entitled to the allowance: Wife and children, parents and grandparents, but only such of these latter as were previously supported by the soldier. Allowances are granted to legitimate families only.

The necessary funds are transmitted from the treasury of each provincial government to the treasuries of the districts into which the Province is divided, and there given out under receipt to the representative official of each municipality or township.

PENSIONS.**DISABILITY PENSIONS.**

The law of June 23, 1912,¹ providing pensions to officers in the Army was extended on November 3, 1914, to include naval officers. The pensions are divided into two classes according to the seriousness of the disability involved. Those of the first class are due to men who are permanently incapacitated and require the constant care of another person. For such disability due to war, regardless of the length of his service, or for such disability incurred in peace time after 25 years of service, the officer receives his salary and in addition the table money and supplementary allowance drawn by him while in active service. According to the data for 1913 this pension would vary for generals from 4,200 rubles (\$2,161.32) to 6,000 rubles (\$3,087.60); for colonels and lieutenant colonels from 2,400 rubles (\$1,235.04) to 3,900 rubles (\$2,006.94); and for the remaining ranks it varies from 720 rubles (\$370.51) to 1,740 rubles (\$895.40). The pension for this kind

¹ *Sobranie Uzakonenii i Rasporiajenii Pravitelstva* (Collection of Laws and Orders), 1912, 2nd semester No. 1225.

of disability incurred in peace after a service of less than 25 years is 60 per cent of the salary.

Pensions of the second class are due to officers also permanently incapacitated but not requiring the care of another person. If incapacity occurred in the war after 5 years of active service or less, 60 per cent of salary is paid; an increase of 2 per cent is made for each additional year; after 25 years the pension is 100 per cent. In time of peace, 50 per cent instead of 60 per cent is paid after 5 years, and 100 per cent only after a service of 30 years.

Application for these pensions must be sent to the commander of the regiment, or corresponding unit in which the pensioner served. The pensions are paid from the treasury of each Province.

The officer who becomes ill while serving at the front or who is wounded receives part of his salary, free hospital treatment, and, if sent to a hospital outside of the place of his residence, 75 kopeks (39 cents) daily; if treated at home, he receives from 1 to 2 rubles (51 cents to \$1.02) daily, according to locality. He is also indemnified for loss of property. On his return to service a traveling allowance is paid him consisting of fare and 1.50 to 2 rubles (77 cents to \$1.02) daily, according to rank.

Disability pensions to soldiers, determined by the law of June 25, 1912, are very much smaller. For privates, they vary from 216 rubles (\$111.15) annually to 30 rubles (\$15.44), according to the degree of incapacity. Beneath the two classes of total incapacity (100 per cent loss of working power), the first of invalids requiring the constant care of another person and the second of invalids not requiring such care, pensions are graded to loss of working power according as this loss has been from 100 to 70 per cent, 70 to 40 per cent, or 40 to 10 per cent, respectively. For noncommissioned officers these same classes hold, but they receive the private's pension increased by 10 per cent after one year of service and by 20 per cent after five years of service.

SCHEDULE 65.—Russia. Pensions for enlisted men.

[Amounts outside parentheses are in rubles; amounts inside parentheses are in dollars.]

	Privates.	Under-Officers.		Remarks.	Laws.
		With not less than 1 year's service.	After 5 year's service.		
Pension					
I. 7	216 (111.15)	216+10%	216+20%	These pensions are granted irrespective of the personal means of the recipient. They are determined either for life or according to the probability of recovered working capacity.	Law of June 25, 1912. Svod Zakonov Rossiiskoi Imperii (Codified Laws of Russia), edited by Dobrovolskii, 1913, Vol. III, supplement 56, p. 2714ff.
II. stant care of another person ¹	168 (86.45)	168+10%	168+20%		
III. 70, 100 per cent loss of working power.	108 (55.68)	108+10%	108+20%		
IV. 40, 70 per cent loss of working power.	66 (33.96)	66+10%	66+20%		
V. 10, 40 per cent loss of working power.	30 (15.44)	30+10%	30+20%		
Temporary relief in case of need given on application.	10 to 25 (5.15 to 12.87)			This pension is granted on ground of poverty irrespective of pension from national treasury. Only those soldiers are pensioned who as a result of wounds have incurable defects or illnesses.	Temporary Orders of Aug. 17 and Nov. 17, 1914. Reprinted in G. V. Severin, Rannnye Otdary i Nishnie Chiny, Petrograd, 1914, pp. 158 and 160. Svod Voennih Postanovlenii (Military Code) 1889. Edition of 1902 and supplement of 1907
Assistance from Alexander Committee: ²	240 (123.50)				
1. Wounded of first class ³	120 (61.75)				
2. Wounded of second class ³					

¹ Wounded of first class are soldiers requiring constant care by another person; of the second class those who have lost a limb or are incurably ill, but do not require care of another person.

² Alexander Committee, organized in 1814, constitutes part of the ministry of war.

³ Nonrecurrent grants are also given by the committee.

Soldiers' disability pensions are paid at the district treasury offices three times a year in advance. At the recipient's request they may be paid at the township offices.

In addition to providing disability pensions the Government makes provision for temporary assistance in case of wounds or illness.¹ If the soldier is unable to continue service, he is given free railway and steamship transportation home, traveling expenses to a certain daily amount, and civilian clothing if he has none of his own. In case of serious injuries the soldier may be given temporary shelter at a special invalids' home and, if he needs them, artificial limbs at the Government's expense. Temporary relief in case of need may also be given on application to officers and soldiers under the temporary orders of August 17 and November 17, 1914. These grants range from 300 rubles (\$154.38) to 25 rubles (\$12.87) in the case of officers and in the case of soldiers from 25 rubles (\$12.87) to 10 rubles (\$5.15). Special funds are assigned for this purpose.

An order of July 15, 1916, provides disability pensions to a third group of persons, namely, skilled workers and common laborers in all Government workshops and railroads who become incapacitated in the course of their work, and as a result of enemy action. Temporary disability is compensated by one-half of the workman's wages; permanent total disability by two-thirds.

PENSIONS TO WIDOWS AND OTHER DEPENDENTS.

Survivors' pensions, according to the law of June 23, 1912,² are paid to the widow and children of officers dying of wounds, killed in battle, or missing. The widow receives in any case one-half of the pensionable salary; each child one-sixth. A widow and three or more children receive the full amount of the officer's salary. The pensionable salary—that is, the basis on which the pension is computed—consists of the salary proper, the table allowance, and the supplementary allowance (see Schedule 67, p. 203, for pay of officers). The sons are entitled to pensions up to the age of 17, the daughters up to the age of 21; or, in case of each, until entrance into school at Government expense or into the Government service; also until marriage, if this takes place before the age of 21, in case of daughters.

An important provision was made in the law of 1916, cited above, itself amending the law of June 16, 1905, on the care of children of soldiers killed in the war with Japan.³ It applies to children of officers in the Army and Navy and to children of nonmilitary persons of officers' rank employed on steamers or serving in the medical,

¹ Svod Voennih Postanovlenii (Military Code), 1869, Bk. XIX, edition of 1910. Reprinted in G. V. Severin, *Ranenye Ofitseri i Nizhnie Chiny* (Pensions to Officers and Soldiers), Petrograd, 1914, p. 110.

² See footnote 1 at bottom of p. 197.

³ *Sobranie Uzakonenii i Rasporiazhenii Pravitelstva*, 1905, otd. 1, 2oe pohug., no. 1036, and otd. 1, 1oe pohug., no. 920.

veterinary, pharmaceutical, and other divisions of the Army or Navy. To each child up to the age of 6 years an annual pension of 75 rubles (\$38.60) is assigned; from 6 to 10 years, 125 rubles (\$64.33); and from 10 to 18 years, 300 to 450 rubles (\$154.38 to \$231.57). Up to the age of 10 years a child is entitled to this pension and also to one-sixth of the deceased officer's salary spoken of above. After that age only one of these pensions is given, at the choice of the mother or guardian.

The law also prescribes special measures for the placing of these children in educational institutions; upon admission traveling expenses are paid; at the time of graduation from high school, 150 rubles (\$77.20) are granted if the recipient does not enter a higher institution of learning. The pension may be extended until graduation from high school, but not after the age of 21.

Pensions to survivors of soldiers, as given in the law of June 25, 1912,¹ are much less generous. The widow receives from 84 rubles to 48 rubles (\$43.23 to \$24.70) a year according to her husband's rank and length of service. A full orphan receives one-half of the widow's pension up to the age of 17 years; two receive three-fourths; three or more receive the full amount.

The law of 1916, already cited, provides assistance for children of soldiers as well as officers. Each child up to the age of 16 receives annually 24 rubles (\$12.35), 30 rubles (\$15.44), or 42 rubles (\$21.61), according to the size of the city; an increase of not over 40 per cent may be granted to full orphans. At the time of entering school warm clothing, shoes, and school supplies are provided to the amount of 15 rubles (\$7.72). In especially deserving cases an educational assistance of from 50 rubles (\$25.73) to 150 rubles (\$77.19) annually may be granted.

¹ See footnote 3 on p. 196.

SCHEDULE 66.—Russia. Pensions to widows and other dependents of soldiers or sailors killed in war, dying in consequence of injuries, or missing.

ARMY AND NAVY.

[Amounts outside of parentheses are in rubles; amounts inside of parentheses are in dollars.]

	Noncommissioned officers.		Privates.	All other soldiers.	Remarks.	Laws.
	With 5 years' service beyond required term.	With 1 year's service beyond required term.				
Pay (in peace) ¹	312 to 252 (160.56 to 129.68)	252 to 192 (129.68 to 98.80)	.....	.....
Penslons:						
Widow.....	84 (43.23)	60 (30.88)	60 (30.88)	48 (24.70)		Law of June 25, 1912, Svod Zakonov Rossiiskoi Imperii (Codified Laws), edited by Dobrovolskii, 1913, Vol. III, sup. 56, p. 2714 ff.
Children—						
a. Each child up to 16 years ²						
b. Full orphans under 16 years ³						
Alternative to b, c. Full orphans under 17 years ¹ —						
1. If 1 only.....	42 (21.61)	30 (15.44)	30 (15.44)	24 (12.35)		
3. If 2.....	63 (32.42)	45 (23.16)	45 (23.16)	36 (18.53)		
2. If 3 or more.....	84 (43.23)	60 (30.88)	60 (30.88)	48 (24.70)		
Temporary allowance in case of need, family.....		10 (5.15) to 25 (12.87)				Law of June 25, 1912 (see above).
Assistance from Alexander Committee, ³ widow and children; in their absence, parents.....						Temporary orders, Aug. 17 and Nov. 17, 1914. G. V. Severin, Itanenye Otkazy i Nizhnii (hiny) (Pensions to Officers and Soldiers), Petrograd, 1914, pp. 158, 166.

¹ Figures for October, 1913. Veltzé's Internationaler Armeé-Almanach, 1913-14.
² Penslons given to children under Laws of 1912 and 1916 are not granted simultaneously; the more advantageous pension is accorded.
³ The Alexander Committee, organized in 1814, constitutes part of the ministry of war.

SCHEDULE 67.—Russia. Military pay table.

[Source: Veltzé's Internationaler Armeé-Almanach, 1913-14.]

[Amounts outside of parentheses are in rubles; amounts inside of parentheses are in dollars.]

Grade.	Annual salary.	First class.			Eighth class.			Additional allowance.	Lump sum.				Mobilization allowances.	
		Rent.	Stall.	Light and fuel.	Rent.	Stall.	Light and fuel.		To bachelor.	To married officer.	For guns, clothes, etc.	For horses, transport, equipments.	Regular mobilization allowance.	Field allowance (only while in war area).
Full general.....	2,100 (1,080.66)	1,692 (870.70)	138 (71.01)	500 (257.30)	534 (274.80)	42 (21.61)	125 (64.83)	.....	350 (180.11)	700 (360.22)	250 (128.65)	Allowance proportionate to number of horses, etc., required according to rank.	10 (5.15)	20 (10.29)
Lieutenant general.	1,800 (928.28)	1,512 (778.08)	102 (52.49)	375 (192.98)	444 (228.48)	30 (15.44)	110 (56.61)	.....	300 (154.38)	600 (308.76)	250 (128.65)		5 (2.57)	10 (5.15)
Major general....	1,500 (771.90)	1,332 (685.45)	84 (43.23)	250 (128.65)	426 (219.22)	24 (12.35)	75 (38.60)	.....	250 (128.65)	500 (257.30)	250 (128.65)		4 (2.06)	8 (4.12)
Colonel.....	1,200 (617.52)	906 (466.23)	84 (43.23)	200 (102.92)	306 (157.47)	24 (12.35)	62.5 (32.16)	480 (247.01)	200 (102.92)	400 (205.84)	150 (77.19)		3 (1.54)	6 (3.09)
Lieutenant colonel.	1,080 (555.77)	594 (305.67)	36 (18.53)	150 (77.19)	198 (101.89)	12 (6.18)	37.5 (19.30)	480 (247.01)	180 (92.63)	360 (185.26)	150 (77.19)		2 or 1.5 (1.03)	4 or 3 (2.06)
Captain.....	900 (463.14)	426 (219.22)	18 (9.26)	100 (51.46)	132 (67.93)	6 (3.08)	25 (12.87)	360 (185.26)	150 (77.19)	300 (154.38)	100 (51.46)		1 (.51)	2 (1.03)
"Stabs" captain.	780 (401.39)	246 (126.59)	62.5 (32.16)	62.5 (32.16)	102 (52.49)	.....	17.5 (9.01)	300 (154.38)	130 (66.90)	260 (133.80)	100 (51.46)		1 (.51)	2 (1.03)
Lieutenant.....	720 (370.51)	246 (126.59)	.....	62.5 (32.16)	102 (52.49)	.....	17.5 (9.01)	240 (123.50)	120 (61.75)	240 (123.50)	100 (51.46)		.75 (.39)	1.50 (.77)
Second lieutenant.	660 (339.64)	246 (126.59)	.....	62.5 (32.16)	102 (52.49)	.....	17.5 (9.01)	180 (92.63)	110 (56.61)	220 (113.21)	100 (51.46)		.75 (.39)	1.50 (.77)
Ensign.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50 (25.73)		.50 (.26)	1 (.51)
Nonmilitary employee of army of ensign's rank.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.50 (.26)	1 (.51)

TABLE MONEY.

Corps commandant.....	5,700	(2,933.22)
Division commandant.....	4,200	(2,161.32)
Brigadier commandant.....	2,700	(1,389.42)
Regiment commandant.....	2,700	(1,389.42)
Battalion commandant.....	660	(339.64)
Company commandant.....	360	(185.26)

NOTE 1.—Officers in command of an army unit receive 2 or 1½ times the amounts given above.

NOTE 2.—For purpose of computing pension, salary equals salary proper plus table allowance plus supplementary allowance.

The temporary orders of August 17 and November 17, 1914, provide for grants in case of need to officers' and soldiers' families. The amounts vary from 300 rubles (\$154.38) to 25 rubles (\$12.87) in the case of families of officers, and from 25 rubles (\$12.87) to 10 rubles (\$5.15) for families of soldiers.

Survivors' pensions are also paid to families of employees in all Government workshops and on railroads, irrespective of age or sex, who lost their lives as a result of enemy action. A funeral benefit is paid, 30 rubles (\$15.44) for an adult and 15 rubles (\$7.72) for a child. The widow receives one-third of her husband's annual wages for life; each child up to the age of 15 receives one-sixth, a full orphan one-fourth. (Order of July 15, 1916.)

Allowances and pensions to dependents of officers and soldiers are given to legitimate families only. The question of extending the benefits of the law to illegitimate children and their mothers was discussed in legislative circles; the superior council organized for the relief of soldiers' families in its meeting of November 13, 1914, went on record against such an extension, saying that the "enacting of a law which would grant the same allowance to an illegitimate family would not contribute to the stability of the foundation of the legitimate family and would undoubtedly influence adversely popular conception of the holiness of marital union."¹ On account of lack of sources it is impossible to state whether any action has been taken toward an inclusion of illegitimates in the system of military pensions and allowances.

The law of July 15, 1916, however, which provides pensions for nonmilitary employees of Government workshops and railroads, includes illegitimate families.

ADMINISTRATION.

The procedure connected with the administration of the allowance and pension laws was complicated and very slow. For this reason, on September 26, 1914, new regulations were issued abolishing some of the formalities of the administration of the officers' allowances and pensions, and securing in this way a more speedy grant and payment.

Similar steps in the direction of efficient administration of soldiers' allowances and pensions were taken about a year later. On July 21, 1915, the minister of the interior issued a circular to all governors of provinces asking them to take the "most effective measures for the immediate payment of the allowances to soldiers, and not to delay such payments on account of lack of the necessary documents, but, on the contrary, to try to obtain the missing documents as quickly as possible from the civil and military authorities concerned."²

¹ *Izvestia Verhovnago Sovieta po prizreniu semei litz prizvannih na voinu*, January, 1915, p. 18.

² *Idem*, July-September, 1915, p. 296.

OFFICIAL COMMITTEES.

In addition to the pensions definitely prescribed by law, assistance is also given on application by the Alexander Committee for the Care of the Wounded. This committee is a permanent body organized in 1814, and at present a part of the ministry of war. The relief it distributes comes chiefly from the invalidity fund, raised in part by deductions from the officers' salaries. The committee gives financial assistance in the form of either single grants or regular pensions; it also places invalids in asylums or homes and assists in the education of children. The annual pensions vary according to rank and degree of disability; a general, for instance, or his family in case of his death, may receive from 1,716 rubles (\$883.05) to 1,143 rubles (\$588.19); a colonel from 510 rubles (\$262.45) to 305 rubles (\$156.95); a second lieutenant from 360 rubles (\$185.26) to 210 rubles (\$108.07); a soldier 240 rubles (\$123.50) to 120 rubles (\$61.75).

The definite legal provisions for orphans are supplemented by assistance from the Romanov Committee. This committee was established by a law of June 29, 1914, for the purpose of giving financial aid to orphan asylums. On September 1, 1914, however, a ministerial decree was issued directing the committee to assist in the care of children of soldiers and sailors called to war service. According to its report the committee spent from the latter part of 1914 to April 30, 1915, 971,535 rubles (\$499,951) on assistance to child-caring agencies. The funds are derived partly from the treasury and partly from private contributions.

The activity of the various organizations, both public and private, for the care of soldiers' and officers' families is coordinated and supervised by the supreme council for the care of families of war participants, established by an imperial order of August 11, 1914. The supreme council has in its possession funds from private and public sources which it distributes among the various organizations.

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SWITZERLAND.¹

MILITARY INSURANCE.

According to the Swiss constitution of 1874 and subsequent legislation for military organization, all citizens between the ages of 20 and 48 meeting the legal requirements are subject to military service.² Those exempted from personal service pay an exemption tax, fixed by the law of June 28, 1878.³

In the matter of pensions,⁴ the "Organization Militaire" of 1850 provided that soldiers wounded or mutilated in the Federal service, or their dependent relatives if they lost their lives, should in case of need receive an indemnity for assistance "suitable to their state of fortune."⁵ The law of 1852, intended to carry out this provision, granted an allowance to men wounded while meeting the enemy or disabled through the special fatigues or dangers of the service, in case the earning power necessary to their support was reduced, and it fixed the maximum indemnity at 500 francs (\$96.50) annually. The dependent relatives of soldiers killed under the same circumstances received a maximum of 300 francs (\$57.90). The constitution of 1874 took a step forward in the matter of government responsibility, by asserting that needy soldiers permanently disabled through military service, and their families when in need, had a right to government aid, and the pension law of that year extended the provisions of the old law to soldiers injured in time of peace on the same terms as those injured in time of war. It also raised the maximum annual amounts to 1,200 francs (\$231.60) for permanent disability, 650 francs (\$125.45) for widows with children, and 330 francs (\$62.55) for widows without children.

In 1887 the Government tried the experiment of contracting with a private insurance company (*la société anonyme pour les assurances*

¹ The Swiss material was prepared by Miss Louise F. Brown and Miss Edith Rockwell Hall.

² Federal Constitution, 1874; *Organization Militaire de la Confédération Suisse*, 1907, *Feuille Fédérale* 1907, II, p. 725.

³ A personal tax of 6 francs (\$1.16); a supplementary tax (a) 1 franc 50 centimes (29 cents) for each 1,000 francs (\$193) net fortune. (b) 1 franc 50 centimes (29 cents) for each 100 francs (\$19.30) net income. Fortunes less than 1,000 francs (\$193) are not taxed, and an allowance of 600 francs (\$115.89) is made on incomes before subjecting them to taxation. Those who have served at least eight years and have become incapacitated for further service pay only one-half their tax, unless it is remitted entirely; and from the age of 32 to 44 years also men are liable for only the half rate.

The Federal Assembly has the right to double this tax in years when the greater part of the troops are called out, and in the present crisis this was done by the decree of Dec. 23, 1914. (*Recueil Officiel* No. 3, 1877-78, p. 532; *Recueil Officiel* No. 30, 1914, p. 678.)

⁴ An account of the history of Swiss military pensions is to be found in the Message of the Federal Council to the Federal Assembly, Dec. 12, 1912, *Feuille Fédérale*, 1912, V, p. 151.

⁵ *Feuille Fédérale*, 1912, V, p. 152.

de transports et contre les accidents "la Zurich") for the insurance of its soldiers. The indemnity to be paid in case of death or total invalidity amounted to 10,000 francs (\$1,930) for officers, and to 3,000 francs (\$579) for noncommissioned officers and privates. In case of total incapacity for work the company paid, for the cost of treatment and loss of earnings, 10 francs (\$1.93) a day during the illness for officers, and 3 francs (\$0.58) a day for noncommissioned officers and privates; in case of partial incapacity for work the company paid half benefits. These indemnities were allowed from the day after release from the army to the end of the term of the physician's services, not, however, to exceed 200 days from the accident. In 1893 there was an attempt to correct the disproportion between the sums paid to officers and to soldiers by reducing the total invalidity or death insurance for officers to 5,000 francs (\$965) and their disability indemnity to 5 francs (96½ cents). But in spite of this modification the system proved unsatisfactory, partly because of legal difficulties in its administration, partly because the sums provided were insufficient, and in general because the feeling was growing that the pension ought to be measured by the soldier's loss of earning capacity rather than by his "state of fortune." Other attempts to arrive at a satisfactory system were made in 1898, 1901, 1906. The first of these was the law establishing the system of civil insurance, in which it was proposed to include provisions for military insurance also. The proposal was rejected by referendum in 1900, and the legislation failed likewise to supply a satisfactory system. Under pressure of the present war emergencies the matter of pensions has been the subject of entirely new legislation in the law of December 23, 1914.¹ This plan, the provisions of which are analyzed in the annexed schedule, follows closely the lines of the Swiss civil insurance.² While the administration of the two systems is kept distinct, a close cooperation has been established between the military and civil accident services, and the use of the same tribunal for the two systems has been adopted.³

The military insurance thus established is administered by the Swiss military department through its chief medical officer, who is provided with the necessary staff and has the cooperation of the technical experts of the Government.⁴ A pension committee of seven members, appointed for three years by the Federal Council, decides on the amounts and conditions of the pensions and capital indemnities, in consultation with the chief medical officer. Appeals from the decisions of the pension committee or of the chief medical

¹ *Feuille Fédérale*, 1915, I, p. 45.

² See p. 210.

³ Federal act respecting military insurance, Dec. 23, 1914, art. 55. *Bulletin of International Labor Office* (English edition), Vol. X, p. 33.

⁴ Article 62.

officer are brought before the Federal insurance court. The Federal Council issues the regulations for the administration of the insurance. The Federal Assembly decides on the mode of covering pensions in case of war or other public calamity, and appropriates funds for the system.

SCHEDULE 68.—Switzerland. Military insurance.

[Table based on Federal act respecting military insurance, Dec. 23, 1914. *Feuille Fédérale*, 1915, I, p. 45. English translation in Bulletin of the International Labor Office, 1915, Vol. X, p. 2.]

A. FORM OF INSURANCE AND CLASSES INSURED.

Form of insurance.	Classes insured.
Against sickness and accidents: (a) Sickness and accidents during service or exercise of military functions. (b) Sickness and accidents going on duty or returning home. (c) Sickness due to injurious influences during above period. ¹	1. Soldiers of all ranks while on service. 2. Officers on special service with foreign arms. Divisional controllers of arms and their tutes and assistants during the exercise of their military functions. The sanitary staff of the Swiss societies for assisting the wounded, organized and under military authority, while on service. The members of the voluntary corps of recruits while on service.
Against sickness and accidents..... Between the taking up of command and its resignation or the expiration of any functions connected with it.	3. Commanders of units of the Army.
Against sickness and accidents..... Between beginning and termination of engagements.	4. Instructors. Officials, guards, and other permanent employees in fortifications. Permanent employees and auxiliary Cavalry remount depot and of those connected with the horse department. Permanent attendants at Federal military hospitals.
Against accidents..... During the exercise of their functions.	5. District commanders, sectional chiefs, and their functionaries during recruiting and inspections. Officers, instructors, gymnastic experts, secretaries officially attached to recruiting operations. Experts for valuing horses. Officers giving shooting instruction and members of shooting committees. Officers' servants. The assistant staff who attend to targets and other implements of instruction. Persons engaged by a corps of troops on behalf of the National Government.
Against accidents..... While going through their exercises.	6. The military members of rifle clubs. Persons taking part in preparatory military instruction. Persons employed as markers in connection with rifle clubs and preparatory military instruction. Young men called up for examination as recruits.

¹ Sickness must be verified by a certified physician and reported within 3 weeks. If not so reported, it will be considered only under special conditions.

SCHEDULE 68.—*Switzerland. Military insurance—(Continued).*

B. BENEFITS.

Benefits.	Basis of computation.	Amount.
Hospital treatment ¹ Wages continued for duration of service (Class 1 only).	Rank or school pay.....	Full pay.
Daily unemployment allowance during temporary disability: First 31 days of sickness— a. For Class 1 (30 days following service)..... b. For other classes.....		a. 3 francs. b. Rate for each class fixed by Federal Council.
After 30 days (all classes).....	Daily earnings up to 8 francs (\$1.54) computed on $\frac{1}{12}$ an- nual wage, or $\frac{1}{6}$ monthly wage, or $\frac{1}{4}$ weekly wage. ²	Total disability, ³ 80 per cent; partial disability, in propor- tion.
Pensions for permanent disability ⁴	Annual earnings based on daily earnings computed as above, multiplied by 360. ⁵	Total disability, 70 per cent; partial disability, in propor- tion.
Pensions for dependents, in case of death:		
a. Wife— 1. Widow, ⁶ or divorced or legally separated wife entitled to full maintenance. ⁷ 2. Divorced or legally separated wife entitled to partial maintenance. ⁷		40 per cent. In proportion to husband's ob- ligation.
b. Children under 18 ⁸ — 1. Each child, if widow or di- vorced wife is living. ⁷ 2. Each child, if widow or di- vorced wife is dead.	Annual earnings of deceased, based on daily earnings, computed as above, multi- plied by 360.	15 per cent. 25 per cent.
c. Parents wholly or partly depend- ent, if no claims as above.		20 per cent for one; 35 per cent for both.
d. Grandparents, if parents receive no pension, or brothers and sis- ters, if no claims as above.		Not to exceed 15 per cent for one or 25 per cent for several.
Funeral expenses.....		Up to 40 francs (\$7.72).

¹ This includes free maintenance and treatment at the hospital appointed, with expenses of conveyance to hospital. If home treatment is authorized or ordered, an allowance of 2 francs 50 centimes (48 cents) a day is made. A suitable increase is granted when expenses greatly exceed this allowance (arts. 21-22).

² In case of destitution, the allowance may with the consent of the Federal Council be increased to the full amount of the daily earnings, for a definite or indefinite period (art. 26). In case of a person without dependents, the allowance is reduced one-half during hospital or home treatment (art. 29).

³ When earnings vary, the average wage is taken. Apprentices, students, etc., have their wages assumed to be 3 francs (58 cents) a day. Earnings chiefly or wholly in kind are computed according to the usual wage of the district for similar work, but at not less than 4 francs (77 cents) except for apprentices, etc. Regular supplementary earnings and revenue from investments are taken into account only if they cease or diminish as a result of the illness or accident (art. 25).

⁴ Granted for permanent invalidity or serious ill health affecting capacity for work; for life or for a definite period. In the latter case it can be extended or changed to a pension for life. A disability pension is replaced by a lump sum if the person seems likely to recover his ability to work by resuming his occupation. The amount is based on the probable extent of his loss of earnings (arts. 34, 35). Pensions can be doubled by the Federal Council if the person was disabled or killed while voluntarily exposing himself to great risk for his country (art. 40).

⁵ For minors, computed on the scale of an adult, but not to exceed the earnings of a person 30 years old (art. 35). In case of destitution it can be increased. (Ibid.) All pensions may be reassessed at any time (art. 36).

⁶ A widow on remarrying receives a settlement of three times the annual amount (art. 42).

⁷ In case of concurrent claims of widow and divorced wife, total pensions not to exceed 50 per cent. In case of children's claims, in addition, total not to exceed 65 per cent.

⁸ Including adopted and legitimated children and illegitimate children whose paternity has been legally acknowledged (art. 43). Pension to cease at 18 except in case of disabling infirmity (art. 43).

The National Government bears all the expenses of the military insurance, except when the persons insured have been called into service exclusively in the interest of a particular canton or locality, in which case the Government can recover the cost of the insurance

officer are brought before the Federal insurance court. The Federal Council issues the regulations for the administration of the insurance. The Federal Assembly decides on the mode of covering pensions in case of war or other public calamity, and appropriates funds for the system.

SCHEDULE 68.—*Switzerland. Military insurance.*

[Table based on Federal act respecting military insurance, Dec. 23, 1914. *Feuille Fédérale*, 1915, I, p. 45. English translation in Bulletin of the International Labor Office, 1915, Vol. X, p. 23.]

A. FORM OF INSURANCE AND CLASSES INSURED.

Form of insurance.	Classes insured.
Against sickness and accidents: (a) Sickness and accidents during service or exercise of military functions. (b) Sickness and accidents going on duty or returning home. (c) Sickness due to injurious influences during above period. ¹	1. Soldiers of all ranks while on service. 2. Officers on special service with foreign armies. Divisional controllers of arms and their substitutes and assistants during the exercise of their military functions. The sanitary staff of the Swiss societies for assisting the wounded, organized and placed under military authority, while on active service. The members of the voluntary corps of motorists while on service.
Against sickness and accidents..... Between the taking up of command and its resignation or the expiration of any functions connected with it.	3. Commanders of units of the Army.
Against sickness and accidents..... Between beginning and termination of engagements.	4. Instructors. Officials, guards, and other permanent employees in fortifications. Permanent employees and auxiliary staff of Cavalry remount depot and of those connected with the horse department. Permanent attendants at Federal military hospitals.
Against accidents..... During the exercise of their functions.	5. District commanders, sectional chiefs, and other functionaries during recruiting and inspections. Officers, instructors, gymnastic experts, and secretaries officially attached to recruiting operations. Experts for valuing horses. Officers giving shooting instruction and members of shooting committees. Officers' servants. The assistant staff who attend to targets and other implements of instruction. Persons engaged by a corps of troops on behalf of the National Government.
Against accidents..... While going through their exercises.	6. The military members of rifle clubs. Persons taking part in preparatory military instruction. Persons employed as markers in connection with rifle clubs and preparatory military instruction. Young men called up for examination as recruits.

¹ Sickness must be verified by a certified physician and reported within 3 weeks. If not so reported, it will be considered only under special conditions.

SCHEDULE 68.—*Switzerland. Military insurance—Continued.*

B. BENEFITS.

Benefits.	Basis of computation.	Amount.
Hospital treatment ¹	Rank or school pay.....	Full pay.
Wages continued for duration of service (Class 1 only).		
Daily unemployment allowance during temporary disability:		
First 30 days of sickness—		
a. For Class 1 (30 days following service).....		a. 3 francs.
b. For other classes.....		b. Rate for each class fixed by Federal Council.
After 30 days (all classes).....	Daily earnings up to 8 francs (\$1.54) computed on $\frac{3}{4}$ annual wage, or $\frac{1}{6}$ monthly wage, or $\frac{1}{4}$ weekly wage. ²	Total disability, ³ 80 per cent; partial disability, in proportion.
Pensions for permanent disability ⁴	Annual earnings based on daily earnings computed as above, multiplied by 360. ⁵	Total disability, 70 per cent; partial disability, in proportion.
Pensions for dependents, in case of death:		
a. Wife—		
1. Widow, ⁶ or divorced or legally separated wife entitled to full maintenance. ⁷		40 per cent.
2. Divorced or legally separated wife entitled to partial maintenance. ⁷		In proportion to husband's obligation.
b. Children under 18 ⁸ —		
1. Each child, if widow or divorced wife is living. ⁷	Annual earnings of deceased, based on daily earnings, computed as above, multiplied by 360.	15 per cent.
2. Each child, if widow or divorced wife is dead.		25 per cent.
c. Parents wholly or partly dependent, if no claims as above.		20 per cent for one; 35 per cent for both.
d. Grandparents, if parents receive no pension, or brothers and sisters, if no claims as above.		Not to exceed 15 per cent for one or 25 per cent for several.
Funeral expenses.....		Up to 40 francs (\$7.72).

¹ This includes free maintenance and treatment at the hospital appointed, with expenses of conveyance to hospital. If home treatment is authorized or ordered, an allowance of 2 francs 50 centimes (48 cents) a day is made. A suitable increase is granted when expenses greatly exceed this allowance (arts. 21-22).

² In case of destitution, the allowance may with the consent of the Federal Council be increased to the full amount of the daily earnings, for a definite or indefinite period (art. 26). In case of a person without dependents, the allowance is reduced one-half during hospital or home treatment (art. 29).

³ When earnings vary, the average wage is taken. Apprentices, students, etc., have their wages assumed to be 3 francs (58 cents) a day. Earnings chiefly or wholly in kind are computed according to the usual wage of the district for similar work, but at not less than 4 francs (77 cents) except for apprentices, etc. Regular supplementary earnings and revenue from investments are taken into account only if they cease or diminish as a result of the illness or accident (art. 25).

⁴ Granted for permanent invalidity or serious ill health affecting capacity for work; for life or for a definite period. In the latter case it can be extended or changed to a pension for life. A disability pension is replaced by a lump sum if the person seems likely to recover his ability to work by resuming his occupation. The amount is based on the probable extent of his loss of earnings (arts. 34, 38). Pensions can be doubled by the Federal Council if the person was disabled or killed while voluntarily exposing himself to great risk for his country (art. 49).

⁵ For minors, computed on the scale of an adult, but not to exceed the earnings of a person 30 years old (art. 35). In case of destitution it can be increased. (Ibid.) All pensions may be reassessed at any time (art. 36).

⁶ A widow on remarrying receives a settlement of three times the annual amount (art. 42).

⁷ In case of concurrent claims of widow and divorced wife, total pensions not to exceed 50 per cent. In case of children's claims, in addition, total not to exceed 65 per cent.

⁸ Including adopted and legitimated children and illegitimate children whose paternity has been legally acknowledged (art. 43). Pension to cease at 18 except in case of disabling infirmity (art. 43).

The National Government bears all the expenses of the military insurance, except when the persons insured have been called into service exclusively in the interest of a particular canton or locality, in which case the Government can recover the cost of the insurance

from the canton.¹ The Federal Assembly provides, in the annual budget, for the expenses of administration and for the payment of benefits. Appropriations to an invalidity fund which can only be used for benefits in case of war, are made annually to the amount of 500,000 francs (\$96,500) at least. When this fund shall have reached the sum of 50,000,000 francs (\$9,650,000) the Federal Assembly is to decide whether it is advisable to continue payments. Two other funds are available for the payment of insurance benefits only in time of war. These funds are named the Grenus invalids fund and the Federal Winkelried foundation fund.²

When a person entitled to military insurance has been compulsorily insured with the Swiss national accident insurance fund, this civil insurance is suspended. However, if when he enters military service he is suffering from the consequence of an accident or disease against which he had been insured, and the military service aggravates his condition, the civil and military insurance jointly bear the cost. The military insurance department pays the benefit, and is partly repaid by the civil insurance fund in proportion to the extent to which the military service has aggravated his condition. The payments of benefit for temporary disability are made by the military insurance department in conformity with the provisions of the military insurance act, and repaid by the civil insurance fund in the proportion agreed upon. The benefits for permanent disability are paid by each company, the shares being determined in the same way. In the case of persons voluntarily insured in the civil fund, the relations of the two insurances are fixed by regulations of the Federal Assembly.³

CIVIL INSURANCE.⁴

The Swiss sickness and accident insurance law was enacted on the 13th of June, 1911, by the Federal Council, and accepted by referendum on the 4th of February, 1912.

The National Government encourages sickness insurance by granting subsidies to sick insurance funds which are legally recognized. If the cantons or communes make such insurance compulsory, and if they assume the responsibility for the payment of all or a part of the premiums of indigent insured persons, the National Government grants subsidies equal to one-third of their disbursements. While employers can not be made to contribute to the payments made by their employees who are compulsorily insured, they may be made to take charge of the payments to be made by their employees.⁵ Sick

¹ Articles 51, 52, 55, 62, 63.

² Articles 61, 65.

³ Articles 56 to 60.

⁴ The information in this section may be found in the text of the law, *Feuille Fédérale*, 1911, III, p. 815. An English translation is to be found in *Bulletin of the U. S. Bureau of Labor Statistics*, No. 103, Aug. 1, 1912, p. 7.

⁵ Sickness and accident insurance law, June 13, 1911, articles 1, 2.

benefits include medical care and medicines and daily indemnity for loss of time of not less than 1 franc (19.3 cents). Benefits must be provided for at least 180 days each year, and special provision is made for women during confinement.¹

Accident insurance is administered by the national accident insurance fund. Each canton is entitled to an agency of this fund, which conducts insurance on the mutual plan. Its central office is in Lucerne. The National Government granted this fund a working capital of 5,000,000 francs (\$965,000) and the same amount to create a reserve fund. It pays one-half the expenses of administration.²

Accident insurance is compulsory for laborers and other employees working in transportation and postal service; establishments subject to the factory law; building trades; engineering works; telegraph and telephone construction and maintenance; mines, quarries, and gravel banks; industries which produce or use explosives.³

The risks insured against are occupational and nonoccupational. Occupational diseases are classified as accidents.⁴ Different employments are classified according to their risks, and the premium rates are fixed by the officers of the national fund. For occupational accidents they are paid entirely by the employer. For nonoccupational accidents they are paid as follows: Three-fourths by insured person, one-fourth by the National Government; the employer collects the premiums from his employees.⁵ Any person not subject to compulsory insurance may be insured voluntarily, on conditions fixed by the National Government.⁶

SCHEDULE 69.—Switzerland. Civil insurance benefits for accidents.

Beneficiaries.	Disability or death.	Benefits.	
		Kind.	Amount.
Insured workers.....	Any disability.....	Medical attendance and medicines.	
	Temporary disability.	Indemnity for lost time.	80 per cent of daily earnings, maximum, 14 francs (\$2.70).
	Permanent disability:		
	Total.....	Annuity.....	70 per cent annual earnings.
Dependent relatives.....	Partial.....	.....do.....	In proportion to disability. ⁷
	Death of insured person.	Funeral expenses....	Minimum, 40 francs (\$7.72).
		Annuity.....	(Percentages of annual earnings:
			1. 30 per cent. 2a. 15 per cent. 2b. 25 per cent. 3. 20 per cent. Total maximum 60 per cent.
1. Widow or disabled widower			
2. Each child under 16:			
(a) If mother is living....			
(b) If mother is dead.....			
3. Grandparents; brothers and sisters under 16.			

¹ Articles 12, 13, 14.
² Articles 41, 46, 51.
³ Article 60.
⁴ Articles 67, 68.

⁵ Articles 102 to 110, 118, 119.
⁶ Articles 118, 119.
⁷ No earnings beyond 4,000 francs (\$772) are considered (art. 78).

APPENDIXES: PENSIONS IN THE UNITED STATES.¹

Abbreviations.—C. S., Compiled Statutes of the United States, 1916; M. L., Military Laws of the United States, 1917; R. S., Revised Statutes of the United States, 1873; Stat. L., United States Statutes at Large.

APPENDIX A.—PRESENT PENSION PROVISIONS FOR MEN DISABLED IN SERVICE AND FOR WIDOWS AND OTHER DEPENDENTS OF MEN KILLED OR DYING IN SERVICE.

MEN.

Beneficiaries.	Service.	Age or other reason.	Amount.
Officers and men, including regulars, volunteers, and militia. ² Surgeons. C. S., 8933, 8934.	Military or Naval Service of the United States.	Disabled from wound, injury, or disease, incurred or contracted in line of duty. C. S., 8933-8942.	According to extent of disability: 1. Disability equivalent to ankylosis of wrist, rate varies with rank from \$8 monthly for private to \$30 monthly for lieutenant colonel, etc. (See Appendix D.) C. S., 8944. 2. Permanent specific disability, rates fixed by law and varying, without regard to rank, from \$24 to \$100 monthly. The rate for incapacity to perform manual labor is fixed at \$30 a month. (See Appendix B.) C. S., 8947-8962, 8968. 3. Other disabilities, rates fixed by Commissioner of Pensions and varying from \$6 monthly to \$27 monthly. (See Appendix C.) C. S., 8962, 8974, 9072.

WIDOWS AND CHILDREN.

Beneficiaries.	Service of deceased.	Cause of death.	Date of marriage.	Age.	Amount.
Widows ³ of officers and men, including volunteers and militia. ⁴ C. S., 8977.	Military or Naval Service of the United States since 1861.	Wound, injury, or disease incurred in line of duty. ⁵	Prior to Mar. 3, 1899, or later, if before or during the service of husband. ⁶	.....	According to rank of deceased; minimum is \$12 monthly and maximum is \$30 monthly. C. S., 8977, 8980.
	Any service of the United States in the Civil War.	Wound, injury, or disease incurred in line of duty.	.....	70.....	\$20 minimum. C. S., 8981a.
	....do.....	....do.....	Prior to close of Civil War service.	.....	\$20 minimum. C. S., 8981a.

¹ The legislative material has been compiled by Miss Anna Rochester and Miss Lulu L. Eckman, and the statistical material by Miss Louise Moore and Mrs. Marie Francke Smith. Appendixes B, C, and D have been adapted from tables in Laws of the United States Governing the Granting of Army and Navy Pensions, together with Regulations Relating Thereto, published by Bureau of Pensions, United States Department of the Interior, 1916.

² The Coast Guard is not eligible for pensions. (C. S., 8459½a (3).) Officers in Regular Army, Navy, and Marine Corps receive retirement pay and while on retired list are not eligible for pensions.

³ Pension is payable until remarriage, but if widow of a man who served in Civil War has remarried and again becomes a widow, or if a woman who was the wife of the man during his active service in any war has remarried and has again become a widow and is without means of support, she is entitled to a pension. If, however, pension has during remarriage been paid to children it returns to the widow only if they are members of her family and cared for by her. (C. S., 8981b, 8993.)

⁴ The law does not require evidence of marriage from widow of colored or Indian soldier who was habitually recognized as wife in claims on behalf of persons who enlisted before Mar. 3, 1873. (C. S., 8988.)

⁵ Double pension is allowed for death from accident or disease incurred by men in Navy or Marine Corps, in connection with aviation duty. (C. S., 2952½.)

⁶ No limitation as to date if wife has lived and cohabited with the deceased continuously from date of marriage to date of death. This limitation expressly does not apply to widows of men serving in Spanish War. (Act of Mar. 3, 1899; C. S., 8980.)

APPENDIX A.—PRESENT PENSION PROVISIONS FOR MEN DISABLED IN SERVICE AND FOR WIDOWS AND OTHER DEPENDENTS OF MEN KILLED OR DYING IN SERVICE—Continued.

WIDOWS AND CHILDREN—Continued.

Beneficiaries.	Service of deceased.	Cause of death.	Date of marriage.	Age.	Amount.
Child or children ¹ of deceased officer or soldier: 1. If mother is widow. ² 2. If there is no widow, or she has remarried, or she has been deemed improper person ³ to care for child. C. S., 8979, 8990.	Military or Naval ⁴ Service of the United States.	Wound, injury, or disease incurred in line of duty. ⁵	.....	Under 16; or over 16 if insane, idiotic, or otherwise permanently helpless, provided child was under 16 at time of father's death. C. S., 8982.	1. \$2 monthly for each child. ⁶ 2. According to rank of father: Minimum \$12, maximum \$30; and in addition \$2 monthly for each child. C. S., 8977, 8979, 8980, 8983.

OTHER DEPENDENTS.

Beneficiaries.	Service of deceased.	Cause of death.	Amount.
If there is no widow nor legitimate ¹ child, other relatives who were dependent upon the deceased ⁷ are entitled to pension in the following order: 1. Mother. ⁸ 2. Father. 3. Orphan brothers and sisters ⁹ under 16 years of age. C. S., 8991, 8992.	Any Military or Naval ⁴ Service of the United States, since Mar. 4, 1861.	Injury or disease incurred in line of duty. ⁵	Pay according to rank of deceased: Minimum \$12 monthly, maximum \$30 monthly. C. S., 8980.

¹ Child is deemed legitimate who is born before the marriage of its parents, if it is acknowledged by father before or after marriage. But compare footnote 4 on page 213. (C. S., 8987.)
² It is expressly stipulated that increase of pension on behalf of minor child shall not be withdrawn because the child is maintained in whole or in part by the State or the public in an institution. (C. S., 8979.)
³ Pension returns to mother who has been deemed improper person to care for the child when the child ceases to receive it.
⁴ The Coast Guard is not eligible for pensions. (C. S., 8459½a (3).) Officers in Regular Army, Navy, and Marine Corps receive retirement pay and while on retired list are not eligible for pensions.
⁵ Double pension is allowed for death from accident or disease incurred by men in Navy or Marine Corps, in connection with aviation duty. (C. S., 2952½.)
⁶ This supplementary allowance is paid to the mother if she is herself receiving pension and the children are her children by the soldier. But if the widow is a stepmother and is not charged with the child, the supplementary allowance is paid not to the widow but to the guardian. (C. S., 8979.)
⁷ Dependency of parents defined as follows: "Without other present means of support than their own manual labor or the contributions of others not legally bound for their support." (C. S., 8992.)
⁸ Pension is allowed until remarriage of mother.
⁹ Pension to orphan sister ceases on her marriage if this occurs before she is 16 years old. (C. S., 8993)

The following are eligible for admission to the Soldiers' Home: (1) Every soldier of the United States Army who has served 20 years; (2) those of the Regular or Volunteer service who have been wounded or diseased in the service and in line of duty; (3) those who through service in any war have been rendered invalid or disabled. (C. S., 9225.)
Disabled and decrepit Navy officers, seamen, and marines are admitted to the Naval Home at Philadelphia. (C. S., 9203.) Enlisted men received at the Naval Home are not eligible to the special allowance for disability after 10 or 20 years of service shown in Appendix F.

APPENDIX B.—MONTHLY PENSION RATES FIXED BY LAW FOR PERMANENT SPECIFIC DISABILITIES.

Disabilities.	From July 4, 1864 (13 Stat. L., 387).	From Mar. 3, 1865 (13 Stat. L., 499).	From June 6, 1866 (14 Stat. L., 56).	From June 4, 1872 (17 Stat. L., 335).	From June 4, 1874 (C. S., 8950).	From Feb. 28, 1877 (C. S., 8954).	From June 17, 1878 (C. S., 8955, 8951).	From Mar. 3, 1879 (20 Stat. L., 484).	From Mar. 3, 1883 (C. S., 8959).	From Mar. 3, 1885 (23 Stat. L., 437).	From Aug. 4, 1886 (C. S., 8960).	From Aug. 27, 1888 (C. S., 8962).	From Feb. 12, 1889 (C. S., 8957).	From Mar. 4, 1890 (C. S., 8952).	From July 14, 1892 (C. S., 8953).	From Jan. 15, 1903 (C. S., 8963).	From Mar. 2, 1903 (C. S., 8961).	From Apr. 8, 1904 (C. S., 8958).
Loss of both hands.....	\$25.00			\$31.25	\$50.00		\$72.00						\$100.00					
Loss of both feet.....	20.00			31.25	50.00		72.00										\$100.00	
Loss of sight of both eyes...	25.00			31.25	50.00		72.00											
Loss of sight of 1 eye, the sight of the other having been lost before enlist- ment.....			\$25.00	31.25	50.00		72.00											100.00
Loss of 1 hand and 1 foot...		\$20.00		24.00													60.00	
Loss of hand or foot.....			15.00	18.00		\$36.00			\$24.00		\$30.00						40.00	
Loss of an arm at or above the elbow or a leg at or above the knee.....			15.00	18.00	24.00				30.00		36.00						46.00	
Loss of either a leg at the hip joint or an arm at the shoulder joint, or so near as to prevent the use of an artificial limb.....								\$37.50			45.00						55.00	
Loss of leg at hip joint....			15.00	24.00							45.00						55.00	
Loss of an arm at shoulder joint.....			15.00	18.00	24.00					\$37.50	45.00						55.00	
Total disability in both hands.....			25.00	31.25														
Total disability in both feet.....			20.00	31.25														
Total disability in 1 hand and 1 foot.....			20.00	24.00		36.00											60.00	
Total disability in 1 hand or 1 foot.....			15.00	18.00					24.00		30.00						40.00	
Disability equivalent to the loss of a hand or a foot (third grade).....			15.00	18.00					24.00									
Total disability in arm or leg.....			15.00	18.00					24.00		36.00						46.00	
Incapacity to perform manual labor (second grade).....			20.00	24.00					30.00									

¹ The law supplies men with artificial limbs, providing a new limb or the cash value thereof every 3 years at the following rates: Artificial leg, \$75; artificial arm, \$50; artificial foot, \$50; apparatus for resection, \$50. (C. S., 9120-9126.)

APPENDIX B.—MONTHLY PENSION RATES FIXED BY LAW FOR PERMANENT SPECIFIC DISABILITIES—Continued.

Disabilities.	From July 4, 1864 (13 Stat. L., 337).	From Mar. 3, 1865 (13 Stat. L., 499).	From June 6, 1866 (14 Stat. L., 56).	From June 4, 1874 (17 Stat. L., 335).	From June 4, 1874 (C. S., 8950).	From Feb. 28, 1877 (C. S., 8954).	From June 17, 1878 (C. S., 8955, 8951).	From Mar. 3, 1879 (20 Stat. L., 484).	From Mar. 3, 1883 (C. S., 8959).	From Mar. 3, 1885 (23 Stat. L., 437).	From Aug. 4, 1886 (C. S., 8960).	From Aug. 27, 1888 (C. S., 8962).	From Feb. 12, 1889 (C. S., 8957).	From Mar. 4, 1890 (C. S., 8952).	From July 14, 1892 (C. S., 8953).	From Jan. 15, 1903 (C. S., 8963).	From Mar. 2, 1903 (C. S., 8961).	From Apr. 8, 1904 (C. S., 8958).
Regular aid and attendance (first grade) ¹			\$25. 00	\$31. 25	\$50. 00		\$72. 00							\$72. 00				
Frequent and periodical, not constant, aid and attendance (intermediate grade).....															\$50. 00			
Total deafness.....				13. 00								\$30. 00				\$40. 00		

¹ \$72 from June 17, 1878, by act of June 16, 1880, only where the rate was \$50 under act of June 18, 1874, and granted prior to June 16, 1880. First grade proper continued at \$50 until amended by act Mar. 4, 1890, which increased rate to \$72.

APPENDIX C.—MONTHLY PENSION RATES FIXED BY ADMINISTRATIVE
RULINGS FOR CERTAIN DISABILITIES NOT SPECIFIED BY LAW.¹

	Per month.
Ankylosis of shoulder.....	\$12. 00
Ankylosis of elbow.....	10. 00
Ankylosis of knee.....	10. 00
Ankylosis of ankle.....	8. 00
Ankylosis of wrist.....	8. 00
Loss of sight of one eye.....	12. 00
Loss of one eye.....	17. 00
Nearly total deafness of one ear.....	6. 00
Total deafness of one ear.....	10. 00
Slight deafness of both ears.....	6. 00
Severe deafness of one ear and slight of the other.....	10. 00
Nearly total deafness of one ear and slight of the other.....	15. 00
Total deafness of one ear and slight of the other.....	20. 00
Severe deafness of both ears.....	22. 00
Total deafness of one ear and severe of the other.....	25. 00
Deafness of both ears existing in a degree nearly total.....	27. 00
Loss of palm of hand, and all the fingers, the thumb remaining.....	17. 00
Loss of thumb, index, middle, and ring fingers.....	17. 00
Loss of thumb, index, and middle fingers.....	16. 00
Loss of thumb and index finger.....	12. 00
Loss of thumb and little finger.....	10. 00
Loss of thumb, index, and little fingers.....	16. 00
Loss of thumb.....	8. 00
Loss of thumb and metacarpal bone.....	12. 00
Loss of all the fingers, thumb and palm remaining.....	16. 00
Loss of index, middle, and ring fingers.....	16. 00
Loss of middle, ring, and little fingers.....	14. 00
Loss of index and middle fingers.....	8. 00
Loss of little and middle fingers.....	8. 00
Loss of little and ring fingers.....	6. 00
Loss of ring and middle fingers.....	6. 00
Loss of index finger.....	4. 00
Loss of any other finger without complications.....	2. 00
Loss of all the toes of one foot.....	10. 00
Loss of great, second, and third toes.....	8. 00
Loss of great toe and metatarsal.....	8. 00
Loss of great and second toes.....	8. 00
Loss of great toe.....	6. 00
Loss of any other toe and metatarsal.....	6. 00
Loss of any other toe.....	2. 00
Chopart's amputation of foot, with good results.....	14. 00
Pirogoff's modification of Syme's [amputation of foot to instep].....	17. 00
Small varicocele.....	No rate.
Well-marked varicocele.....	No rate fixed.
Inguinal hernia, which passes through the external ring.....	10. 00

¹ The rate of \$18 per month may be proportionately divided for any degree of disability established for which pension laws make no specific provision, and the minimum pension is fixed by law at \$6. Certain minor disabilities are still rated at less than \$6, and the smaller amount applies for each disability in cases where two or more minor disabilities are combined. Rates for partial deafness (under \$30 a month) are fixed by the Secretary of the Interior. (C. S., 8974, 9072, and 8062.)

	Per month.
Inguinal hernia, which does not pass through the external ring.....	\$6. 00
Double inguinal hernia, each of which passes through the external ring.....	14. 00
Double inguinal hernia, one of which passes through the external ring and other does not.....	12. 00
Double inguinal hernia, neither of which passes through the external ring..	8. 00
Femoral hernia.....	10. 00

APPENDIX D.—MONTHLY PENSION RATES¹ FOR WIDOWS OR OTHER DEPENDENTS OF MEN KILLED OR DYING AS A RESULT OF SERVICE.²

WIDOWS, ETC., OF ARMY OFFICERS AND ENLISTED MEN.

	Per month.
Of lieutenant colonel and all officers of higher rank.....	\$30. 00
Of major, surgeon, and paymaster.....	25. 00
Of captain, provost marshal, and chaplain.....	20. 00
Of first lieutenant, assistant surgeon, deputy provost marshal, and quartermaster.....	17. 00
Of second lieutenant and enrolling officer.....	15. 00
Of all enlisted men.....	12. 00

WIDOWS, ETC., OF OFFICERS AND ENLISTED MEN OF NAVY AND MARINE CORPS.

Of captain and all officers of higher rank, commander, lieutenant commanding and master commanding, surgeon, paymaster, and chief engineer ranking with commander by law in Navy; and lieutenant colonel and all of higher rank in Marine Corps	30. 00
Of lieutenant, passed assistant surgeon, surgeon, paymaster, and chief engineer ranking with lieutenant by law; major in Marine Corps.....	25. 00
Of master (now lieutenant, junior grade), professor of mathematics, assistant surgeon, assistant paymaster, and chaplain; captain in Marine Corps.....	20. 00
Of first lieutenant in Marine Corps.....	17. 00
Of first assistant engineer, ensign, and pilot; second lieutenant in Marine Corps.....	15. 00
Of cadet midshipmen, passed midshipmen, midshipmen clerks of admirals, of paymasters, and of officers commanding vessels, second and third assistant engineers, master's mate, and warrant officers.....	12. 00
Of all enlisted men, except warrant officers.....	12. 00

¹ Supplementary allowance of \$2 monthly is granted for each fatherless child under 16.

² These rates apply also to all enlisted men and to officers who are not eligible to retirement pay for a disability equivalent to ankylosis of wrist, except that for enlisted men the rate is \$8 and for cadet midshipmen, etc., the rate is \$10. Double rate is allowed for death or disability due to aviation duty in Navy or Marine Corps.

APPENDIX E.—ARMY RETIREMENT SYSTEM, REGULAR ARMY ONLY.

Person eligible.	Service.	Age or other reason.	Amount.
Any officer, upon his own application.	40 consecutive years, or 30 years at discretion of the President.	.....	75 per cent of pay of rank held at retirement. ¹ (C. S., 2045-2047, 2053-2061, 2063, 2064, 2138. Military Laws of the United States, 1917, 962-964, 968, 958.)
Any officer, at discretion of President, without making application.	.....	62 years.....	
Do	45 years.....	.....
Any officer.....	.....	64 years.....	
Do .....	.....	Incapacitated for active service by physical disability incurred in line of duty.	
Do .....	.....	Physical disability not incurred in line of duty.	Retired with 75 per cent of pay of rank held at retirement or "wholly retired" with 1 year's pay and allowances of rank at time of retirement. (C. S., 2053, 2060, 2061, 2063, 2064, 2140. M. L., 660.)
Any officer below rank of major.	.....	If found upon examination for promotion to be incapacitated for service by physical disability incurred in line of duty.	75 per cent of rank to which seniority entitled him to be promoted. (C. S., 1897. M. L., 930.)
Any officer below rank of brigadier general.	.....	Failure to pass examination for promotion for any reason other than physical disability incurred in line of duty, followed by second failure after suspension of promotion for 1 year.	Honorably discharged from service with 1 year's pay. (C. S., 1897-1897a. M. L., 930, 930b.)
Officer of Medical Reserve Corps.	40 years.....	70 years.....	Retirement pay of first lieutenant. (C. S., 2049. M. L., 748, 749.)
Any officer supernumerary to permanent organization of Army as provided by law.	5 years or more.....	Upon his own request.	1 year's pay for each 5 years of service; maximum, 3 years' pay. (C. S., 2062. M. L., 998.)
Any enlisted man (private or noncommissioned officer).	30 years.....	.....	75 per cent of pay and allowances when retired. (Retirement allowances fixed at \$9.50 plus \$6.25.) Minimum: \$18.75 plus \$15.75. Maximum: \$74.25 plus \$15.75. ² (C. S., 2082-2088. M. L., 713-715, 1038-1042.)
Widow of officer or enlisted man, or other person designated by him.	On active list of Army.	Death of officer or man from wounds or disease not the result of his own misconduct. Death resulting from aviation accident.	6 months' pay. (C. S., 2165. M. L., 1061.) 1 year's pay. (C. S., 1867c. M. L., 889n.)
Any man who has been awarded a medal of honor for distinguished gallantry.	Military service in any war.	65 years.....	\$10 monthly, in addition to any other pay or pension. (C. S., 1941a-e. M. L., 1014a-f.)

¹ Officer who served with credit during Civil War is retired with rank and pay 1 grade above that he held on retirement. (C. S., 2066, 2068a-c. M. L., 969a-d.)
² Officers detailed for duty on Isthmus of Panama with Canal Commission for 3 years or more, not otherwise advanced in rank by act of Mar. 4, 1915, to be retired (when they are retired) with grade higher. (C. S., 2068a, M. L., 927c.)
³ Soldier who has received a certificate of merit (\$2 monthly), continues to receive the full allowance herefor after retirement. (Manual for the Quartermaster Corps, 1916, sections 1491-1493. U. S. Army Regulations 1917, section 1341.)

NOTE ON ARMY PAY.¹

Officers.—In the United States Army the pay of officers ranges from \$11,000, that of lieutenant general, to \$1,700, that of second lieutenant. An increase of 10 per cent is allowed when serving outside of the United States (except in the Canal Zone, Panama, Porto Rico, or Hawaii).

Officers below the rank of brigadier general receive a 10 per cent increase for each five years of service, not to exceed 40 per cent (except that the maximum pay of colonel may not exceed \$5,000, of lieutenant colonel \$4,500, or of major \$4,000). Aviation officers of the Signal Corps receive an increase of 25 per cent, junior military aviators 50 per cent, and military aviators 75 per cent. Quarters, heat, and light, in kind, or commutation therefor, are also allowed at rates varying with rank from the minimum of two rooms, with heat and light, allowed to a second lieutenant. The commutation of officers' quarters is rated at \$12 monthly per room, and the commutation of heat and light varies with number of rooms, season, and climate.

An officer's retirement pay amounts to 75 per cent of the salary, without allowances, to which he is entitled at the time of this retirement. The officer who is disabled because of wounds received in battle is entitled to increases in retirement pay corresponding to the increases in active service pay to which he would have been entitled for additional years of active service in the same rank. These increases in retirement pay amount to 10 per cent of the lowest retirement pay of the officer's rank and are granted for each 5 years since the officer entered service, up to 20 years for officers having rank of major or lower, and up to 15 years for officers having rank of colonel or lieutenant colonel. For officers of higher rank the salary, and therefore the retirement pay, are uniform without a longevity increase. It should be especially noted that this increase in retirement pay granted for longevity after retirement is not allowed to an officer retired for any cause other than disability resulting from wounds in battle.

Enlisted men.—Enlisted men, during their first term of enlistment, receive from \$15, private or private second grade, to \$75 per month, quartermaster sergeant, senior grade, and those of equal rank; this is increased for each reenlistment up to the seventh, when a maximum of \$25 to \$99 is reached. Additional pay of \$2 to \$9 monthly is allowed for certain special details or qualifications, and a 50 per cent increase is granted to an "aviation mechanician." A certificate of merit entitles a man to \$2 monthly.

¹ Based on Manual for the Quartermaster Corps, United States Army, 1916, sections 1200-1246, 2375, and "Army pay tables" compiled under the direction of the Quartermaster General, United States Army, Aug. 1, 1916, with supplements including acts of May 12 and 18, 1917.

An increase of 20 per cent is granted for foreign service (not including service in the Canal Zone, Panama, Hawaii, or Porto Rico). The pay on which this increase is based includes additions for length of service, for certificate of merit, and for aviation mechanician, but not the additions for other special details or qualifications.

During the present emergency the pay of enlisted men receiving \$21 a month or less as base pay has been increased \$15 a month. Smaller increases are allowed to higher paid men, graded inversely with the salary, the enlisted man with base pay of \$45 monthly or more receiving an increase of \$6 monthly. The minimum paid to the men in European service to-day, therefore, is \$33 monthly.

Under certain circumstances quarters and rations for enlisted men may be commuted. The commutation of quarters is \$15 a month plus an allowance for heat and light varying with season and climate; the ration is commuted at 30 cents, \$1, or \$1.50 daily, according to circumstances.

APPENDIX F.—NAVY RETIREMENT SYSTEM.

Person eligible.	Service.	Age or other reason.	Amount.
Any commissioned or warrant officer.	30 years.....	Upon his own application and in the discretion of the President.	75 per cent of shore pay of rank. ¹ (C. S., 2621, 2632, 2890, 2894.)
Do .....	.....	Physical disability incident to duty.	
Do .....	.....	Physical disability not incident to duty; or failure to secure promotion after case has been acted upon by two boards.	Either 50 per cent of shore pay for life, or "wholly retired" with 1 year's pay. (C. S., 2625, 2633, 2890, 2894.)
Do .....	.....	64 years ²	75 per cent of shore pay of rank. (C. S., 2623a, 2894.)
After June 30, 1920, captain.	.....	57 years	2½ per cent of shore duty pay of rank for each year of service; maximum, 75 per cent of shore duty pay. (C. S., 2697h.)
After June 30, 1920, commander.	.....	51 years	
After June 30, 1920, lieutenant commander.	.....	46 years	
Any enlisted man (including any petty officer).	30 years.....	Upon his own application.	75 per cent of pay of his rating plus \$15.75 monthly in allowances. (C. S., 2084.)
Any enlisted man.....	20 years.....	Disabled for sea service...	Pension equal to 50 per cent of the pay of his rating at the time of his discharge. ³
Do .....	.....	Disability resulting from aviation accident.	Full pay of his rating. ³

¹ The Navy act of May 22, 1917, expressly provides that any officer of the permanent Navy or Marine Corps temporarily advanced in grade or rank under this act who shall be retired from active service under his permanent commission while holding such temporary rank, except for physical disability incurred in line of duty, shall be placed on retired list with grade or rank to which position in permanent Navy or Marine Corps would entitle him, and not be entitled to rights of retirement except for physical disability incurred in line of duty.

Two laws make provision for retirement with three-fourths of sea pay of next higher grade for officers serving with credit during the Civil War. (C. S., 2641, 2642.)

² Officers on the active list not below grade of commander who have received a vote of thanks from Congress for distinguished service in the Civil War are not subject to retirement except for cause until after 55 years of service. (C. S., 2624.)

³ See discussion of Navy pay, pp. 223 to 226.

APPENDIX F.—NAVY RETIREMENT SYSTEM—Continued.

Person eligible.	Service.	Age or other reason.	Amount.
Any enlisted man	10 years	Disability	"Suitable amount": Maximum, \$8 monthly. Double allowance for an aviation accident. (C. S., 9088, 9089, 8986a.)
Do	16 years	Upon his own request	Transferred to Fleet Naval Reserve; pay is one-third of base pay of the rating which he held at close of active service, plus all additions earned by length of service. ¹
Do	20 years .....	.....do	Transferred to Fleet Naval Reserve; pay is one-half of base pay of his rating with additions as above. ¹ (C. S., 2900½b.)
Enlisted man in Fleet Naval Reserve.	30 years, including active and reserve.	.....	Reserve pay plus \$15.75 monthly allowance. ¹
Widow of officer or enlisted man on active list, or other person previously designated by him.	.....	Death of officer or man from wounds or disease contracted in line of duty.	6 months' pay. (C. S., 2870.)
		Death of officer or man from aviation accident in line of duty.	1 year's pay. (C. S., 2870b.)
Any man who has been awarded a medal of honor for distinguished gallantry.	Naval service in any war.	65 years	\$10 monthly in addition to any other pay or pension. (C. S., 1941a-e.)

¹ See discussion of Navy pay, pp. 223 to 226.

NAVY RETIREMENT—GENERAL NOTES.¹

Provisions for officers and men in the Marine Corps are similar to those for the Army, except that retirement of officers with Civil War service is like that of Navy officers with Civil War service, and the provision for men disabled after 10 or 20 years of service in the Navy applies also to the Marine Corps. The administration is, however, under the Navy Department. (For Coast Guard retirement, see text of report, pp. 15 to 17. C. S. 2949-2952b, 2870, 2870b, 8459½a (3), 8459½b (23-29), 8542-8543.)

When the Naval Reserve is actively employed it is on the same pay footing as the Navy. When it is not actively employed its members are not eligible either to pension or retirement, except the men of the Fleet Naval Reserve. (See chart, above, and p. 225, following.) Also, the act of August 29, 1916 (39 Stat. L., 590) provides that after 20 years of service members who have performed required minimum amount of service shall upon application be retired and

¹ Based on "Navy pay tables" in Register of the Commissioned and Warrant Officers of the United States Navy and Marine Corps, Jan. 1, 1917.

receive a cash gratuity equal to total amount of retainer pay during last term of enrollment. This varies with rank and branch of service, and is in all cases only a nominal sum.

Enlisted men in the Navy who are disabled after 20 years or 10 years in the service may be granted an allowance in addition to a pension under the general pension laws. But the man who has served 10 years, but less than 20 years, may not receive as an allowance in addition to a pension more than one-fourth the rate of the pension.

Navy pay is composed of "base pay" and "permanent additions" thereto.

By "base pay" is meant the pay that a man would receive upon first enlistment in any rating. By "permanent additions" is meant the increases in pay a man receives for continuing in the service, for maintaining a good record, etc. These permanent additions are as follows:

1. An increase of \$1.36 per month for each successive reenlistment. The reenlistment must occur after honorable discharge from a previous enlistment or after discharge bearing recommendations for reenlistment, and the reenlistment must occur within four months of the date of such last discharge. A man in his sixth successive reenlistment would thus receive an addition of \$8.16 per month to his base pay.

2. Every citizen who reenlists receives—for his first reenlistment—an increase of \$5 to his monthly pay. For each successive reenlistment thereafter he receives an additional \$3. At the beginning of his seventh reenlistment this pay would amount to \$23 per month.

3. Men who maintain satisfactory records throughout an enlistment and serve in continuous service, etc., are issued good-conduct medals. These medals carry with them an increase in pay of 75 cents per month. A man holding six medals would receive on this account, \$4.50 per month.

4. Men who complete prescribed courses of instruction for seaman gunner or petty officer, and who receive from the Navy Department certificates to that effect, receive for such certificates, while in continuous service, the sum of \$2 per month.

"Base pay" plus "permanent additions" make the "total base pay" of a man. This total, by act of May 13, 1908, was increased by 10 per cent. Thus if a man's initial base pay is \$50 and his permanent additions \$15, the 10 per cent on the two (\$6.50) would make his total pay \$71.50 per month.

During the period of the present war the base pay of all enlisted men in the Navy has been increased by from \$6 to \$15 per month,

the largest increase going to the lowest paid men. Before the war the lowest rating received \$17.60 per month. During the continuance of the war the lowest rating will receive \$32.60 per month.

Aboard every ship there are many special ratings for which men are paid extra money. Some of these rates are: Coxswains of steam launches (\$5 per month), crew messmen (\$5), gun pointers (\$2 to \$10), gun captains (\$5), Navy mail clerk (\$5 to \$30), submarine duty (\$5), and certain qualified men for submarine duty while the vessel is engaged in diving receive additional pay not to exceed \$15 per month. Enlisted men in the Navy, while detailed for aviation duty involving actual flying, receive a 50 per cent increase above their base pay and permanent additions.

Temporary additions are not considered in reckoning retirement or disability pay. They are, however, included in the death gratuity which is paid to the widow or other designated person when a man is killed in service and which amounts to six times the monthly pay the man was receiving or, if his death occurred in an aviation accident, 12 times his monthly pay, at the date of his death.

In reckoning the pay of the man who is transferred to the Fleet Naval Reserve, disabled after 20 years' service, or retired after 30 years all permanent additions must be considered.

For example, a first-class seaman who has served 20 years and is disabled may have been receiving during his twentieth year of service the following monthly active pay:

Initial base pay.....	\$24.00
Continuous-service pay.....	5.44
Citizenship bonus.....	14.00
Seaman gunner.....	2.00
Good-conduct medal (75 cents for each completed term).....	3.00
<hr/>	
Total.....	48.44
10 per cent increase under act of May 13, 1908.....	4.84
<hr/>	
	53.28
Temporary increase under act of May 22, 1917.....	8.00
<hr/>	
	61.28

If he is allowed half pay for disability his half pay is reckoned on the sum of the initial base pay, the continuous-service pay, and the citizenship bonus plus the general 10 per cent increase. The special allowances and the temporary increase would not in his case be included.

Initial base pay.....	\$24. 00
Continuous-service pay.....	5. 44
Citizenship bonus.....	14. 00
	<hr/>
	43. 44
10 per cent increase (act of May 13, 1908).....	4. 34
	<hr/>
	2)47. 78
Half pay for disability.....	23. 89

In reckoning the retirement pay of a first-class seaman who has served 30 years as a seaman and is receiving a base pay of \$24 in active service the same permanent additions must be included, but the amounts will have increased with the longer service. Also, the special allowances for seaman gunners, etc., and for good conduct are continued without reduction for retired men. And a new allowance amounting to \$15.75 is added as commutation for the living received in active service.

Initial base pay.....	\$24. 00
Continuous-service pay.....	9. 52
Citizenship bonus.....	23. 00
	<hr/>
Total base pay.....	56. 52

To the three-fourths of the total base, or \$42.39, should be added the money allowed for good-conduct medals and certificates of graduation from seaman gunner or petty officers' schools, plus the 10 per cent increase allowed under act of May 13, 1908, and the commutation of living, thus:

75 per cent total base.....	\$42. 39
Seaman gunner.....	2. 00
Good-conduct medal (75 cents for each completed term).....	4. 50
	<hr/>
	48. 89
10 per cent increase (act of May 13, 1908).....	4. 89
Allowance to retired men (commutation of living).....	15. 75
	<hr/>
	69. 53

The retirement pay for petty officers after 30 years' service varies with their rating and for a chief petty officer who is a citizen of the United States and who holds a permanent appointment, a seaman gunner's certificate, and good-conduct medals may amount to \$107.48 per month.

The enlisted man who is transferred to the Fleet Naval Reserve after 16 or 20 years of service is subject to call to active duty, but during his reserve service, when he is not called to active duty, he receives monthly pay which is one-third or one-half of his base pay, and besides this he still receives the permanent additions which had been allowed for continuous service for citizenship, gunnery, or good-conduct medals. He may receive also a special 10 per cent increase

for heroism or, if he has been in the service 20 years, for efficiency, sobriety, etc.

The pay of the first-class seaman whose base pay is \$24 and who has been in the service 16 years is, therefore, reckoned as follows in the Fleet Naval Reserve:

Continuous service.....	\$4.08
Citizenship bonus.....	11.00
Seaman gunner.....	2.00
Good-conduct medal (75 cents for each completed term).....	2.25
	<hr/>
	19.33
Initial base.....	24.00
	<hr/>
	43.33
	<hr/>
One-third of initial base.....	8.00
Permanent additions as above.....	\$19.33
10 per cent of initial base plus additions (act of May 13, 1908).....	4.33
	<hr/>
	23.66
	<hr/>
	31.66
10 per cent for heroism.....	3.17
	<hr/>
Monthly allowance.....	34.83

When the enlisted man in the Fleet Naval Reserve has completed 30 years of service (16 active and 14 reserve or 20 active and 10 reserve) he may be retired with the pay he had in the Reserve plus the \$15.75 monthly allowed as commutation of living to retired men.

In addition to all other retirement pay or pension, the enlisted man who is 65 years old may receive a medal of honor for a record of distinguished gallantry in the face of the enemy. This includes an allowance of \$10 monthly.

Officers' pay.—The annual pay of officers of the United States Navy ranges from \$10,000 (that of admiral in command of fleet) to \$1,700 (that of ensign). Those below the rank of vice admiral, second in command, receive an increase of 10 per cent for sea service and for service outside the United States. Officers of the Navy below the rank of rear admiral and officers of the Marine Corps below the rank of brigadier general receive an increase of 10 per cent for each 5 years of service, not to exceed 40 per cent in all (except that the maximum pay of captain may not exceed \$5,000, of commander \$4,500, nor of lieutenant commander \$4,000). Officers of the Navy and Marine Corps appointed student aviators and detailed for aviation duty receive an increase of 35 per cent of rank and service and those who have qualified as naval aviators an increase of 50 per cent.

Warrant officers receive annually during the first three years of service \$1,125 while on shore duty and \$1,500 when on duty at sea; this is increased every three years until the maximum of \$2,000 is reached for shore duty and \$2,250 for sea duty.

Commutation of quarters, heat, and light is allowed both commissioned and warrant officers while on shore duty, provided there are no public quarters for their accommodation. The rates are the same as those allowed to the Army and noted on page 220.

APPENDIX G.—PRESENT PROVISIONS FOR SERVICE PENSIONS FOR SURVIVORS OF SPECIFIED WARS AND FOR THEIR WIDOWS AND CHILDREN.

SURVIVORS.

Beneficiaries.	Service.	Age or other reason.	Amount.
Indian wars: Surviving officers and enlisted men, including marines, militia, and volunteers in Indian wars prior to 1861. (C. S. 9058-9067.)	30 days in military or naval service of the United States, or shorter period if personally named for specific service in a resolution of Congress.		
Survivors of Texas Volunteers (1859-1861), Tyler's rangers of 1864, and "military service of United States" in specified Indian wars, 1865-1891. (39 Stat. L., 1199.)	30 days, or entire campaign if less than 30 days.	.....	\$20 monthly. (C. S., 9067, and 39 Stat. L., 1199.)
Mexican War: Surviving officers and enlisted men, including marines, militia, and volunteers, during Mexican War.	60 days or more in military or naval service of the United States, or any period if actually engaged in battle or personally named for specific service in congressional resolution. (C. S., 9036.)	62 years..... 70 years..... 75 years.....	\$12 monthly. ¹ (C. S., 8964, 9044.) \$15 monthly. ¹ (C. S., 8964.) \$20 monthly. ¹ (C. S., 8964.)
Any person serving during Mexican War. (C. S., 8968-8969.)	60 days or more in military or naval service of United States.	.....	\$30 monthly. (C. S., 8968.)
Civil War, act of June 27, 1890: Any person who served during the Civil War. (C. S., 8937.)	90 days or more in the military or naval service of United States.	Incapacitated for manual labor by any permanent mental or physical disability, not the result of vicious habits.	\$6 to \$12 monthly, proportioned to degree of inability to earn a support. ²
Civil War, act of Feb. 6, 1907: Any person who served during the Civil War. (C. S., 8964.)	90 days or more in the military or naval service of United States.	62 years..... 70 years..... 75 years.....	\$12 monthly. ² \$15 monthly. ² \$20 monthly. ²
Civil War, act of May 11, 1912: Any person who served during the Civil War. (C. S., 8968-8972.)	90 days or more in military or naval service of the United States.	62 years or over...	\$13 to \$30 monthly, according to age and length of service. See Appendix H.
Do.....	.....	Unfit for manual labor as result of wound or disease incurred in line of duty.	\$30 monthly.
Civil War, act of Aug. 5, 1892: Women employed by surgeon general of Army as nurses, under contract or otherwise, or by authority recognized by War Department. (C. S., 9070.)	6 months or more of actual service.	Unable to earn a support.	\$12 monthly.

¹ Pensioners may receive, upon application, \$30 monthly under act of May 11, 1912. (C. S., 8971.)

² Act of Mar. 4, 1907, allowed pensioner, upon his own application, to receive pension under act of Feb. 6, 1907, instead of under former act. The act of May 11, 1912, allowed similar election.

³ Pensioner under this act may, upon application, be transferred to act of May 11, 1912.

APPENDIX G.—PRESENT PROVISIONS FOR SERVICE PENSIONS FOR SURVIVORS OF SPECIFIED WARS AND FOR THEIR WIDOWS AND CHILDREN—Continued.

WIDOWS AND CHILDREN.

Beneficiaries.	Service of deceased.	Cause of death.	Date of marriage.	Age.	Amount.
War of 1812: Widow ¹ of Army officer or enlisted or drafted man in War of 1812. (C. S., 9036-9037.)	14 days in military or naval service of United States or less if in any engagement.				\$12 monthly. (C. S., 8980.)
				70 years.....	\$20 monthly. (C. S., 8981a.)
Indian wars: Widow ¹ of officer or enlisted man, including marines, militia, volunteers in Indian wars prior to 1861. (C. S., 9058-9066.)	30 days, or, if personally named in a congressional resolution, less than 30 days.				\$12 monthly. (C. S., 8980; 39 Stat. L., 1199.)
Widows¹ of those in Indian wars 1865-1891. (39 Stat. L., 1199.)	30 days in military service of United States, or entire campaign if less than 30 days.		Before Mar. 4, 1917.		
War with Mexico: Widow ¹ of officer or enlisted man, including marines, militia, or volunteers in Mexican War. (C. S., 9036.)	60 days, or any period if actually engaged in a battle or personally named in a congressional resolution.			62 years; or if subject to dependency recognized by pension laws of United States.	\$12 monthly. (C. S., 8963.)
				70 years.....	\$20 monthly. (C. S., 8981a.)
Civil War, acts of Apr. 19, 1908,² and Sept. 8, 1916:					
Widow of officer or enlisted man in the Civil War.	90 days or more in military or naval service of the United States.		Before June 27, 1905. (C. S., 8981c.)		\$12 monthly. (C. S., 8964.)
			Prior to end of husband's service in Civil War.		\$20 monthly. (C. S., 8981a.)
			Before June 27, 1905.	70 years.....	
Civil War, act of June 27, 1890, as amended:² Child or children of deceased officer or soldier in service of United States during Civil War: 1. If mother is widow. 2. If there is no widow, or if she has been remarried or deemed an improper person to care for child. (C. S., 8982.)	90 days.....		Parents married prior to June 27, 1890. (C. S., 8982.)	Under 16; or over 16 if insane, idiotic, or otherwise permanently helpless provided child was under 16 at time of father's death (C. S., 8982.)	1. \$2 monthly, for each child. 2. Children receive the widow's pension of \$12 and the supplementary allowance of \$2 for each child. (C. S., 8982-8983.)

¹ Children receive no pension under service acts relating to War of 1812, Indian wars, or War with Mexico.

² The act of Apr. 19, 1908, has superseded the provisions for widows under act of June 27, 1890.

**APPENDIX H.—SERVICE PENSIONS FOR CIVIL-WAR SURVIVORS UNDER
ACT OF MAY 11, 1912. (C. S., 8968.)**

Length of service.	Monthly amount for specified ages.			
	62 years but under 66.	66 years but under 70.	70 years but under 75.	75 years and over.
90 days.....	\$13.00	\$15.00	\$18.00	\$21.00
6 months.....	13.50	15.50	19.00	22.50
1 year.....	14.00	16.00	20.00	24.00
1 year 6 months.....	14.50	16.50	21.50	27.00
2 years.....	15.00	17.00	23.00	30.00
2 years 6 months.....	15.50	18.00	24.00	30.00
3 years or more.....	16.00	19.00	25.00	30.00

**APPENDIX I.—PRINCIPAL CHANGES SINCE 1860 IN PENSIONS GRANTED
FOR DISABILITY OR DEATH IN SERVICE.**

SURVIVORS.

Date of act.	Service and beneficiary.	Monthly allowance.
July 22, 1861.....	Army pension. Volunteers in new Army to be on the same footing as Regulars; half pay for total disability; inferior disability in proportion. (12 Stat. L., 270.)	\$8 to \$47.50.
July 14, 1862.....	Army and Navy. Define beneficiaries. Fix rates for total disability by rank, with new maximum. (12 Stat. L., 566, 625.)	\$8 to \$30.
July 16, 1862.....		
July 17, 1862.....		
	Navy pensions. Maximum rate for disability incurred in line of duty increased to amount of monthly pay. (12 Stat. L., 608.)	
July 4, 1864.....	Army and Navy. Introduce and extend military and naval pensions higher than half pay of private, granted without respect to rank, for permanent specific disabilities. (13 Stat. L., 387, 499; 14 Stat. L., 56.)	See Appendix B.
Mar. 3, 1865.....		
June 6, 1866.....		
July 25, 1866.....	Army and Navy pensions. Applies amended rates to persons disabled before Mar. 4, 1861, except Revolutionary War pensioners. (14 Stat. L., 230.)	
Mar. 2, 1867.....	Navy pensions. Special allowance in addition to general pension for disabled sailors and petty officers who have served 10 years or 20 years. 20 years: Half pay of rating in lieu of home at naval asylum. 10 years: In proportion to disability; maximum is half pay of rating and, if in receipt of general pension also, one-fourth of such pension. (C. S., 9088-9089.)	Half pay or less.
June 8, 1872.....	Army and Navy pensions. Rates for permanent specific disabilities increased. (17 Stat. L., 335.)	See Appendix B.
Mar. 3, 1873.....	Army and Navy pensions. Codifies existing provisions. Fixes maximum of \$18 for disabilities not specified, to be proportionately divided for inferior disabilities. (17 Stat. L., 566-577.)	
June 18, 1874.....	Army and Navy pensions. Rates for permanent specific disabilities increased. (C. S., 8950, 8954, 8955.)	Do.
Feb. 28, 1877.....		
June 17, 1878.....	Army and Navy pensions. Payment of arrears authorized. (C. S., 9002-9004.)	
Jan. 25, 1879.....		
Mar. 3, 1879.....		
Mar. 3, 1879.....		
June 16, 1880.....		
Mar. 3, 1883.....	Army and Navy pensions. Rates for permanent specific disabilities increased. (C. S., 8956, 8951, 8959; 23 Stat. L., 437; C. S., 8960, 8962, 8957, 8952, 8953.)	Do.
Mar. 3, 1885.....		
Aug. 4, 1886.....		
Aug. 27, 1888.....		
Feb. 12, 1889.....		
Mar. 4, 1890.....	Mexican War. Pensioners now on rolls and wholly disabled for manual labor and in destitute circumstances. (C. S., 9042, 9043.)	Minimum rate increased to \$12.
July 14, 1892.....		
Jan. 5, 1893.....		
Apr. 23, 1900.....	Army and Navy pensions. Minimum for inferior disability. (C. S., 9072.)	\$6.
Mar. 2, 1895.....	Army and Navy. Rates for permanent specific disabilities increased. (C. S., 8963, 8961, 8958.)	See Appendix B.
Jan. 15, 1903.....		
Mar. 2, 1903.....		
Apr. 8, 1904.....	Civil War, military and naval service. Unable to perform manual labor as result of wound. (C. S., 8968-8972.)	\$30.
May 11, 1912.....		
Mar. 3, 1915.....	Navy pension. Double rate allowed for disability from aviation in line of duty. (C. S., 8986a.)	

APPENDIX I.—PRINCIPAL CHANGES SINCE 1860 IN PENSIONS GRANTED FOR DISABILITY OR DEATH IN SERVICE—Continued.

WIDOWS AND OTHER DEPENDENTS.

Date of act.	Service and beneficiary.	Monthly allowance.
July 22, 1861.....	Army pensions. Widow or legal heirs of man killed in battle (volunteers in new army raised for the Civil War). (12 Stat. L., 270.)	\$100 lump sum.
July 14, 1862.....	Army and Navy pensions. Widow or children under 16 years old, or dependent parents or brothers or sisters under 16, of man killed in service or as result of injury in line of duty are to receive pension the deceased would have received for "total disability." Amount varies with rank. (See Appendix D.) (12 Stat. L., 566, 625; 13 Stat. L., 387, 499; 14 Stat. L., 56.)	\$8 to \$30.
July 16, 1862.....		
July 4, 1864.....		
Mar. 3, 1865.....		
June 6, 1866.....	Army and Navy pensions: Widow receives supplementary monthly allowance for each child under 16 years old. Widows on roll because of deaths before Mar. 4, 1861, and subsequent to Revolution receive pensions at amended rates. (14 Stat. L., 230.)	\$2 \$8 to \$30.
July 25, 1866.....		
July 27, 1868.....	Army and Navy pensions. Widow is not to be deprived of supplementary allowance for the children because they are inmates of a home. Widow does not receive allowance on behalf of children of a former wife unless they are in her charge. Minimum for widow receiving pension because of husband's service in Revolutionary War. (15 Stat. L., 235, 237.)	\$8.
Mar. 3, 1873.....	Army and Navy pensions. Codifies existing laws and defines legitimacy of child for their administration. (17 Stat. L., 566-577.)	
Jan. 25, 1879.....	Army and Navy pensions. Arrears are to be paid. (C. S., 9002-9004.)	\$12.
Mar. 3, 1879.....		
Mar. 19, 1886.....	Army and Navy pensions. Minimum rate for widows (married before 1886), for children, if there is no widow or she has remarried, and for dependent relatives. (C. S., 8980.)	
June 27, 1890.....	Army and Navy pensions. Provisions concerning dependency of parents are amended. Helpless children are to continue to receive pension for life. (C. S., 8992.)	
Mar. 3, 1901.....	Army and Navy pensions. Widow who had forfeited pension through remarriage and has again become a widow may receive pension if she was wife of officer or enlisted man during his period of service and is left without means of support. (C. S., 8993-8995.)	
Feb. 28, 1903.....		
Mar. 3, 1915.....	Navy pension. Widows (or other dependents) receive double rate if death is due to aviation accident in line of duty. (C. S., 8986a.)	\$24 to \$60.
Sept. 8, 1916.....	Army and Navy. Widows of men who served in Civil War, Mexican War, or War of 1812, if they are now 70 years old, or widows of men who served in Civil War if they were married before close of Civil War service. (C. S., 8981a-b.)	Minimum, \$20.

APPENDIX J.—PRINCIPAL CHANGES SINCE 1860 IN PENSIONS GRANTED FOR SERVICE IN SPECIFIED WARS.

SURVIVORS.		Monthly allowance.
April 1, 1864—Revolutionary War:		
Survivors already on rolls at half their pay to receive annually \$100 additional. (13 Stat. L., 39).		
February 14, 1871—War of 1812:		
Sixty days' service or having been personally named in a congressional resolution. (16 Stat. L., 411).....		\$8
March 9, 1878—War of 1812:		
Service period shortened to 14 days or participation in any engagement. (C. S., 9062-9067).....		8
January 29, 1887—Mexican War:		
Sixty days' service, or actually engaged in battle, or personally named by Congress, and 62 years old or disabled. (C. S., 9036-9041).....		8
June 27, 1890—Civil War:		
Ninety days' service and any disability not the result of vicious habits incapacitating for manual labor. (C. S., 8937).....		6 to 12
July 27, 1892—Indian Wars before 1861 (specified campaigns):		
Thirty days' service or having been personally named in a congressional resolution. (C. S., 9058-9063).....		8
August 5, 1892—Civil War:		
Women nurses who served six months or more, if unable to earn a support. (C. S., 9070).....		12
January 5, 1893—Mexican War:		
For pensioners on roll under act of January 29, 1887, if wholly disabled for manual labor and destitute. (C. S., 9042).....		Rate increased to 12

	Monthly allowance.
April 23, 1900—Mexican War:	
Extends provision of January 5, 1893, to all pensionable survivors.....	\$12
May 9, 1900—Civil War:	
Under act of June 27, 1890, "each and every infirmity shall be duly considered." (C. S., 8937).....	6 to 12
June 27, 1902. Indian Wars before 1861:	
Additional campaigns included under provisions of July 27, 1892. (C. S., 9065).....	8
March 3, 1903—Mexican War:	
All pensioners. (C. S., 9044).....	Rate increased to 12
February 6, 1907, and March 4, 1907—Mexican War:	
Rates increased with age—	
60 days' service, 62 years and over.....	12
60 days' service, 70 years and over.....	15
60 days' service, 75 years and over.....	20
(C. S., 8964-8967.)	
Same acts—Civil War:	
Age of 62 years accepted as pensionable disability and rates increased with age—	
90 days' service, 62 years and over.....	12
90 days' service, 70 years and over.....	15
90 days' service, 75 years and over.....	20
(C. S., 8964-8967.)	
May 30, 1906—Indian Wars before 1861:	
Additional campaigns included under provisions of July 27, 1892. (C. S., 9066).....	8
May 11, 1912—Mexican War:	
Sixty days' service. (C. S., 8968-8972).....	30
Same act—Civil War:	
Rates increased in proportion to age and length of service. (See Table H).....	13 to 30
Any survivor, any service, incapacitated as result of wound, etc.....	30
(C. S., 8968-8972.)	
February 19, 1913—Indian Wars before 1861:	
Pensioners under previous acts. (C. S., 9067).....	Rate increased to 20
March 4, 1917—Indian Wars since 1861:	
30 days' service, or entire campaign, and 62 years old. (39 Stat. L., 1199).....	20

WIDOWS AND CHILDREN.

April 2, 1862. Revolutionary War:	
No new claims for pensions to be received except on behalf of widow whose husband had established claim, or children whose mother had established claim. (C. S., 9069.)	
July 27, 1868. Revolutionary War:	
Minimum for widow receiving pension because of husband's service in Revolutionary War. (15 Stat. L., 237.)	Raised to 8
February 14, 1871. War of 1812:	
Widow of man who served 60 days or was personally named by Congress, if she was married before the treaty of peace which terminated the war. Children not included. (16 Stat. L., 411.).....	8
March 9, 1878. Revolutionary War:	
Widow of man who served 14 days. (20 Stat. L., 27).....	8
Same act. War of 1812:	
Husband's service period shortened to 14 days or participation in any engagement and limitation on date of marriage removed. Children not included. (C. S., 9052-9057.).....	8
March 19, 1886. All widows and children who are pensionable under existing acts. (C. S., 8980.)	
Rate raised to.....	12
January 29, 1887. Mexican War:	
Widow of man who served 60 days or was actually engaged in battle or was personally named by Congress, if she is 62 years old or dependent. Children not included. (C. S., 9036-9037.)..	8
June 27, 1890. Civil War:	
Widow of man who served 90 days, if she had married him before June 27, 1890, and is left without means of support.....	8
For each child under 16, supplementary allowance.....	2
Children receive the widow's pension and supplementary allowance, if there is no widow or widow has remarried.	
Helpless children receiving pension under 16 years of age retain it for life.	
(C. S., 8982.)	
July 27, 1892. Indian Wars before 1861 (specified campaigns):	
Widow of man who served 30 days or was personally named by Congress, children not included. (C. S., 9058-9063).....	8

	Monthly allowance.
May 9, 1900. Civil War:	
Widow may receive pension under act of June 27, 1890, if she has income not exceeding \$250. (C. S., 8937.).....	\$8
June 27, 1902. Indian Wars before 1861:	
Additional campaigns included in provisions of July 27, 1892. (C. S., 9065.) Widow receives..	8
April 19, 1908. All pensionable widows or children receiving pension because there is no widow or she has remarried:	
Rate increased to.....	12
Supplementary allowance for each child is unchanged.....	2
(C. S., 8983-8985.)	
Same act. Civil War:	
Widow of man who served 90 days is eligible for pension, if she was married to him before June 27, 1890, without limitation as to income. (C. S., 8983-8985.).....	12
May 30, 1908. Indian Wars before 1861:	
Additional campaigns included in provisions of July 27, 1892. (C. S., 9066.) Widow receives..	12
September 8, 1916: War of 1812 and Mexican War:	
Pensionable widow, if she is 70 years old. (C. S., 8981a.).....Rate increased to..	20
Same act. Civil War:	
Pensionable widow, if she was married before close of husband's Civil War service or is 70 years old, rate increased to.....	20
Extends date of marriage for widow to receive pension under act of April 19, 1908, to June 27, 1905.	12
Widow dropped from pension roll because of remarriage is to be restored to roll if she again becomes a widow.	
(C. S., 8981a-d.)	
March 4, 1917. Indian Wars, 1861-1891:	
Widow of man who served 30 days or entire campaign. Children not included. (39 Stat. L., 1200.).....	12

APPENDIX K.—ANNUAL DISBURSEMENTS (INCLUDING TREASURY SETTLEMENTS)¹ FOR PENSIONS TO UNITED STATES ARMY AND NAVY, 1860–1916.

[Data from annual reports of United States Commissioner of Pensions.]

Year ended June 30—	Number of pensioners.	Disbursements for pensions.		
		Total.	Army.	Navy.
Total.....		\$4,975,207,201.05	\$4,841,059,361.74	\$134,151,842.08
1860.....	11,284	1,103,562.03	965,486.24	138,075.79
1861.....	10,709	1,073,061.55	922,892.99	150,168.56
1862.....	⁴ 10,232	790,384.76	676,113.60	114,271.16
1863.....	14,791	² 1,025,139.91	885,068.47	144,074.61
1864.....	51,135	³ 4,504,616.92	4,340,368.60	164,247.92
1865.....	85,986	8,525,153.11	8,319,672.49	205,480.62
1866.....	126,722	15,450,549.88	15,158,598.64	291,951.24
1867.....	155,474	20,784,789.69	20,552,948.47	231,841.22
1868.....	169,643	23,101,509.36	22,811,183.75	290,325.61
1869.....	187,963	28,513,247.27	28,168,323.34	344,923.93
1870.....	198,686	29,351,488.78	29,043,237.00	308,251.78
1871.....	207,495	28,518,792.62	28,081,542.41	437,250.21
1872.....	232,229	29,752,746.81	29,276,921.02	475,825.79
1873.....	238,411	26,982,063.89	26,502,528.96	479,534.93
1874.....	236,241	30,206,778.99	29,603,159.24	603,619.75
1875.....	234,821	29,270,404.76	28,727,104.76	543,300.00
1876.....	232,137	27,936,209.53	27,411,309.53	524,900.00
1877.....	232,104	28,182,821.72	27,659,461.72	523,360.00
1878.....	223,998	26,786,009.44	26,251,725.91	534,283.53
1879.....	242,755	33,664,428.92	33,109,339.92	555,089.00
1880.....	250,802	56,689,229.08	55,901,670.42	787,558.66
1881.....	268,830	50,583,405.35	49,419,905.35	1,163,500.00
1882.....	285,697	54,313,172.05	53,328,192.05	984,980.00
1883.....	303,658	60,427,573.81	59,468,610.70	958,963.11
1884.....	322,756	57,912,387.47	56,945,115.25	967,272.22
1885.....	345,125	65,171,937.12	64,222,275.34	949,661.78
1886.....	365,783	64,091,142.90	63,034,642.90	1,056,500.00
1887.....	406,007	73,752,997.08	72,464,236.69	1,288,760.39
1888.....	452,557	78,950,501.67	77,712,789.27	1,237,712.40
1889.....	489,725	88,842,720.58	86,996,502.15	1,846,218.43
1890.....	537,944	106,093,850.39	103,808,850.39	2,285,000.00
1891.....	676,160	117,312,690.50	114,744,750.83	2,567,939.67
1892.....	876,068	139,394,147.11	135,914,611.76	3,479,535.35
1893.....	966,012	156,906,637.94	153,045,460.94	3,861,177.00
1894.....	969,544	139,986,726.17	136,495,965.61	3,490,760.56
1895.....	970,524	139,812,294.30	136,156,808.35	3,655,485.95
1896.....	970,678	138,220,704.46	134,632,175.88	3,588,528.58
1897.....	976,014	139,949,717.35	136,313,914.64	3,635,802.71
1898.....	993,714	144,651,879.80	140,924,348.71	3,727,531.09
1899.....	991,519	138,355,052.95	134,671,258.68	3,683,794.27
1900.....	993,529	138,462,130.65	134,700,597.24	3,761,533.41
1901.....	997,735	138,531,483.84	134,743,790.81	3,787,693.03
1902.....	999,446	137,504,267.99	133,655,245.75	3,849,022.24
1903.....	996,545	137,759,653.71	133,922,252.95	3,837,400.76
1904.....	994,762	141,093,571.49	137,010,616.93	4,082,954.56
1905.....	998,441	141,142,861.33	136,945,695.26	4,197,166.07
1906.....	985,971	139,000,288.25	134,796,283.62	4,204,004.63
1907.....	967,371	138,155,412.46	133,906,700.66	4,248,711.80
1908.....	951,687	153,093,086.27	148,158,735.77	4,934,350.50
1909.....	946,194	161,973,703.77	156,636,689.29	5,337,014.48
1910.....	921,063	159,974,056.08	154,638,598.81	5,335,457.27
1911.....	892,098	157,325,160.35	151,932,675.04	5,392,485.31
1912.....	860,294	152,986,433.72	147,666,611.64	5,319,822.08
1913.....	820,200	174,171,660.80	168,149,975.96	6,021,684.84
1914.....	785,239	172,417,546.26	166,369,641.78	6,047,904.48
1915.....	748,147	165,518,266.14	159,707,790.75	5,810,475.39
1916.....	709,572	159,155,089.92	153,448,386.51	5,706,703.41

¹ Payments by Treasury Department to beneficiaries whose pensions had reverted to the Treasury because they could not be located when pensions were due.

² Not including \$4,003.17 paid from Navy pension and privateers act.

³ This total is \$0.40 too much. See report of U. S. Pension Commissioner, 1864 pp. 653, 654.

⁴ Including 2,073 on rolls of Southern States.

**TREASURY SETTLEMENTS¹ PAID TO SURVIVORS AND TO DEPEND.
ANNUAL DISBURSEMENTS, 1860-1916.**

stone and data in office of Auditor of the Department of the Interior)

[illegible]

¹ Exclusive of arrears of \$11,508.40.
² Exclusive of arrears of \$14,515.72.
³ Exclusive of arrears of \$16,220.63.

* Exclusive of arrears of \$13,076.27.
* Exclusive of arrears of \$5,602.06.

APPENDIX M.—NUMBER OF WIDOWS, OTHER DEPENDENTS, SURVIVORS, AND ARMY NURSES ON THE PENSION ROLL AT THE CLOSE OF EACH FISCAL YEAR, 1860-1916.

[Data from annual reports of the United States Commissioner of Pensions.]

Year ended June 30—	Grand total.	Widows and dependents.			Survivors.	Army nurses.
		Total.	Widows.	Other dependents.		
1860.....	11,284	5,926	.....	.....	5,358	.....
1861.....	10,709	5,494	.....	.....	5,215	.....
1862.....	¹ 10,232	3,818	.....	.....	4,341	.....
1863.....	14,791	6,970	.....	.....	7,921	.....
1864.....	51,135	27,644	.....	.....	23,491	.....
1865.....	85,968	50,104	.....	.....	35,882	.....
1866.....	126,722	71,070	.....	.....	55,652	.....
1867.....	155,474	83,618	.....	.....	71,856	.....
1868.....	169,643	98,686	.....	.....	75,957	.....
1869.....	187,963	105,104	.....	.....	82,859	.....
1870.....	198,686	111,165	.....	.....	87,521	.....
1871.....	207,495	114,101	.....	.....	93,394	.....
1872.....	232,229	115,248	.....	.....	113,954	.....
1873.....	238,411	118,911	.....	.....	119,500	.....
1874.....	236,241	114,613	55,849	58,764	121,628	.....
1875.....	234,821	111,832	54,687	57,145	122,989	.....
1876.....	232,137	107,898	53,329	54,569	124,239	.....
1877.....	232,104	103,381	51,830	51,551	128,723	.....
1878.....	223,998	92,349	50,490	41,859	131,649	.....
1879.....	242,755	² 104,140	.....	.....	138,615	.....
1880.....	250,802	105,392	66,534	38,858	145,410	.....
1881.....	268,830	104,720	70,632	34,088	164,110	.....
1882.....	285,697	103,064	70,921	32,143	182,633	.....
1883.....	303,658	97,616	66,655	30,961	206,042	.....
1884.....	322,756	97,286	67,033	30,253	225,470	.....
1885.....	345,125	97,979	66,275	31,704	247,146	.....
1886.....	365,783	95,437	63,670	31,767	270,346	.....
1887.....	406,007	99,709	65,822	33,887	306,298	.....
1888.....	452,557	108,856	73,037	35,819	343,701	.....
1889.....	489,725	116,026	78,564	37,462	373,699	.....
1890.....	537,944	122,290	84,331	37,959	415,654	.....
1891.....	676,160	139,339	100,710	38,629	536,821	.....
1892.....	876,068	172,826	130,932	41,894	703,242	.....
1893.....	966,012	206,306	161,490	44,816	759,422	284
1894.....	969,544	215,162	173,079	42,083	753,968	414
1895.....	970,524	219,068	179,192	39,876	750,957	499
1896.....	970,678	222,164	185,362	36,802	747,974	540
1897.....	976,014	228,522	194,021	34,501	746,829	663
1898.....	993,714	235,203	203,630	31,573	757,856	655
1899.....	991,519	237,415	208,728	28,687	753,451	653
1900.....	993,529	241,019	214,798	26,221	751,864	646
1901.....	997,735	249,086	224,563	24,523	747,999	650
1902.....	999,446	260,003	236,910	23,093	738,809	634
1903.....	996,545	267,189	245,814	21,375	728,732	624
1904.....	994,762	273,841	254,135	19,706	720,315	606
1905.....	998,441	280,680	262,098	18,582	717,158	603
1906.....	985,971	284,488	267,155	17,333	700,904	579
1907.....	967,371	286,892	270,767	16,125	679,937	542
1908.....	951,687	293,106	278,088	15,018	658,071	510
1909.....	946,194	313,159	298,853	14,306	632,557	478
1910.....	921,083	318,461	304,842	13,619	602,180	442
1911.....	892,098	321,642	308,613	13,029	570,050	406
1912.....	860,294	321,932	309,399	12,533	538,000	362
1913.....	820,200	316,567	304,923	11,644	503,305	328
1914.....	785,239	314,616	303,527	11,089	470,331	292
1915.....	748,147	310,424	299,858	10,566	437,448	275
1916.....	709,572	306,200	296,089	10,111	403,120	252

¹ Including 2,073 on rolls of Southern States. ² "Widows' roll" for 1879 was not analyzed.

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU

JULIA C. LATHROP, Chief

INFANT MORTALITY

RESULTS OF A FIELD STUDY IN WATERBURY, CONN.
BASED ON BIRTHS IN ONE YEAR

By

ESTELLE B. HUNTER

INFANT MORTALITY SERIES No. 7

Bureau Publication No. 29



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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, December 5, 1917.

SIR: Herewith I transmit a study of infant mortality in the city of Waterbury, Conn., being the fourth item in a series of studies of the same subject which the Children's Bureau is conducting.

Miss Estelle B. Hunter was director of the field work and has written the report. Special acknowledgment is made of the services of the special agents who secured the schedules in the field, Misses Eunice Crane, Marie Hourwich, Viola Paradise, Ethel Springer, Ruth True, and Helen Wilson. Miss Wilson made the special study of Waterbury housing. Miss Rena Rosenberg examined schedules in the field and assisted in the preparation of the report. Miss Emma Duke, head of the statistical division of the Children's Bureau, had general supervision of the preparation of the statistical material.

The Children's Bureau acknowledges with much appreciation the cooperation of municipal authorities, of volunteer associations, and of the press in Waterbury.

JULIA C. LATHROP, *Chief.*

Hon. W. B. WILSON,
Secretary of Labor.

FOREWORD.

Although the period covered by this inquiry, June 1, 1913, to May 31, 1915, included the first nine months of the first year of the war, the conditions portrayed in this report are in the main prewar conditions. The extensive changes in industry which have been brought about in Waterbury by the war were just commencing to make themselves felt at the close of the inquiry.

The population of Waterbury, which in 1914 was estimated by the United States Bureau of the Census at 82,517, has been greatly increased during the past three years by the addition of large numbers of negroes from the South and foreign born of many nationalities from other communities who have been attracted by the high wages paid in the munition factories. But coexistent with high wages these newcomers have found an even higher cost of living. Furthermore, the city was unprepared for this sudden increase in population, and even ability to pay for comfortable surroundings has not insured ability to secure them.

The problem of housing these newcomers is beginning to receive attention, but accommodations for housing the rapidly increasing population of the city are still inadequate. In February, 1916, a group of Waterbury citizens petitioned the mayor to appoint a housing committee to investigate and report upon conditions. As a result the mayor appointed a committee of six leading citizens, who secured the services of an expert in city planning. Under his direction the city was surveyed and a report with recommendations was presented to the public through the newspapers.

Acting upon the information in this report two large manufacturing plants have been erecting a number of houses of desirable types, but many of these will not be available before 1918. Although a step in the right direction, they can not begin to meet the immediate demand for housing accommodations.

It is obviously impracticable to attempt to enforce laws pertaining to overcrowding when eviction from one center of congestion would merely increase congestion in another center. Certain conditions, however, could be corrected, such as disrepair of buildings, inadequate or faulty plumbing and toilet facilities, infrequent and irregular collection of garbage, insufficient or impure milk and food supply. These must be adequately supervised and controlled by the city if the health of the community is to be maintained. It should be

recognized that the intensive room congestion as it exists in Waterbury to-day greatly increases the susceptibility of the population to disease. Such health measures as can be taken should therefore be most vigorously enforced. The health department should be responsible for all of this work. But Waterbury, which in 1914 appropriated but 17.7 cents per capita population for its health work, about one-third the recognized minimum, appropriated even less per capita in 1917. It still expects its health department to do efficient work with the staff and equipment which were inadequate in 1914, namely, a part-time health officer, one milk and food inspector, one tenement-house inspector, and one supervisor of garbage collection.

Employment of married women has greatly increased in Waterbury since the beginning of the war, one large munition plant alone employing several thousand women, nearly one-half of whom are married. The employment of mothers brings with it problems of infant and child care, in a proper solution of which the city, as well as the mother, is vitally interested. However, a large measure of the responsibility for the welfare of the children of working mothers rests upon the State or municipality which permits the mother to pursue gainful occupations outside the home. As a basis for intelligent action information on the following points should be secured: (1) What care does the child of the working mother receive? (2) If the child is cared for in a day nursery, what supervision does the nursery receive and by whom is it given? (3) If the child is cared for at home, is some older child required to care for the baby when he should be in school? (4) If the mother works at night, is she able to give the child the proper care during the day?

The results of such an inquiry undoubtedly would lead the community to consider whether it would not prove better, and in the end cheaper, to make provision that would enable the mother to remain at home with her children. Twenty-five States have passed mothers' pension laws providing pensions which permit the mother to remain at home with her children, free from financial worry, until the children themselves reach an age when they can become wage earners.

One private organization is attempting to reduce infant mortality in Waterbury by maintaining an infant-welfare station in that section of the city where infant mortality from preventable causes was highest at the time of the investigation. But the 1916 report for this organization indicates that of the Lithuanians, who, more than any other group, appear to need wise direction in the care of their infants, few have availed themselves of its services.

In brief, many of the conditions set forth in this report as existing in 1915 have grown steadily worse. Furthermore, other factors, such as the addition of new racial elements to the population and

the increased employment of mothers, have contributed to the causes of ill health and high mortality for both adults and children. Such a situation, deplorable at any time, is particularly disastrous when a country is engaged in war. England, Germany, and France are attempting to retrieve the mistakes made at the beginning of the war through their failure to realize that an adequate preparedness program includes increasing and strengthening all public-health measures. Under existing circumstances Waterbury's population, even with greatly increased wages, can not purchase healthful living conditions; until they can be purchased, the city can not expect to conserve the health of the community nor to lower materially its infant mortality rate.

INFANT MORTALITY, WATERBURY, CONN.

INTRODUCTION.

The inquiries of the Federal Children's Bureau into the causes of infant mortality mark the beginning of an attempt on the part of the United States Government to obtain an accurate measure of the relative importance of various factors in the great waste of infant life in this country. Obviously this attempt must rest upon an accurate knowledge of the number and location of births. Owing to the incomplete registration of births and deaths in many sections of the country it is impossible at the present time to compute an exact infant mortality rate for the United States as a whole. We are still guessing at our birth and death rates in spite of the fact that we have long known that uniform methods of keeping our vital statistics are essential to intelligent government.

INFANT MORTALITY RATE.

Infant mortality is a technical term referring to deaths of infants under 1 year of age. An infant mortality rate is the number of such deaths per thousand live births.¹ The usual method of computing an infant mortality rate for a certain area is to divide the number of deaths of infants under 1 year of age occurring in a given calendar year by the number of live births in the same year. Obviously the number of deaths thus secured includes not only deaths of infants born in the same calendar year, but also deaths of some infants born in the preceding year and of some born in a different area. In other words, the two numbers do not refer strictly to the same group of infants. To avoid this inaccuracy the infant mortality rate in this study is based on the number of babies born alive in a certain area within a given 12 months and the number of deaths under 1 year in this same group, thus excluding the deaths of any infants not born in the specified area and period.

That birth registration in the United States is not only universally imperfect, but that it is much more imperfect than death registration, is generally recognized. Hence rates computed by the usual method involve what Phelps has called the great American infant mortality

¹ In some countries the infant mortality rate has been computed on the basis of all births, including stillbirths; but this practice is not general in the United States, nor has it been followed in any work of the Children's Bureau.

fallacy, which arises from dividing the practically complete number of deaths by the incomplete number of births, thereby obtaining too high a death rate.

In 1911 the United States Bureau of the Census¹ estimated that in 23 States and the District of Columbia, containing more than one-half of the population of the United States, at least 90 per cent of the total deaths were registered. Within this part of the death-registration area the infant mortality rate was computed as 124 per thousand live births.² A later report of the Census Bureau shows for 1915 a rate of 100 in the birth-registration area, a much smaller section of the country, consisting of the New England States, New York, Pennsylvania, Michigan, Minnesota, and the District of Columbia and containing about one-third of the population. In these States the rate varies from 70 to 120, as shown below, while the rates for cities of 25,000 population or over in 1910 in the same area range from 54 in Brookline and Malden, Mass., to 196 in Shenandoah, Pa.

State.	Infant mortality rate in calendar year 1915. ^a	State.	Infant mortality rate in calendar year 1915. ^a
Connecticut.....	107	New Hampshire.....	110
Maine.....	105	New York.....	99
Massachusetts.....	101	Pennsylvania.....	110
Michigan.....	86	Rhode Island.....	120
Minnesota.....	70	Vermont.....	85

^a U. S. Bureau of the Census, Birth Statistics, 1915, p. 10.

Although the rate, 100, for the birth registration area of the United States compares favorably with that for Hungary, which was 212 in 1909 and 194 in 1910, it appears unnecessarily high when we consider that New Zealand kept its rate for the entire country down to 62 and 68 for the same years and has since further reduced it to 51.

Reduction of infant mortality in the United States has not kept pace with scientific research, which is constantly adding to the list of preventable diseases. The immediate task of every community should be to prevent infant deaths from such diseases. Medical authorities claim that application of the knowledge at present available would save at least one-half of the infant lives now needlessly sacrificed.

OBJECT AND GENERAL PLAN OF INFANT MORTALITY INVESTIGATIONS.

The main object of this inquiry was to determine not alone the relative frequency of deaths among infants under 1 year of age under different economic, social, and civic conditions, but also the

¹ U. S. Bureau of the Census, Mortality Statistics, 1911, p. 10.

² Ibid., p. 25.

³ Statistics of the Dominion of New Zealand, 1909, 1910, and 1915.

importance of the various economic, social, and civic factors in determining an infant mortality rate.

With its limited force and funds the Children's Bureau could not extend its inquiries throughout the entire United States. It therefore decided to make intensive studies in each of a number of typical areas throughout the country, the results eventually to be combined and related. The choice of the first areas was necessarily restricted to places of such size as could be covered thoroughly within a reasonable time by the few agents available for the work; and in order to obtain a complete record of the births and deaths in a selected community without the necessity of making a house-to-house canvass, communities within the birth-registration area with populations of 50,000 to 100,000 in 1910 were selected.

All the cities chosen were manufacturing centers, each with a large foreign element. The initial study was made in Johnstown, Pa., a steel-manufacturing city, where none of the large factories employed women. This was followed by studies in Manchester, N. H., a cotton-manufacturing town with a high percentage of women at work outside their homes; Brockton, Mass., a shoe-manufacturing center with a high wage level; Saginaw, Mich., a town of varied industries; and New Bedford, Mass., a seaboard textile town. A similar study was made by the city of Montclair, N. J., using schedules furnished by the Children's Bureau, which later tabulated and published the results.

SELECTION OF WATERBURY.

Waterbury, Conn., was the seventh city selected as a unit in this national study of the causes of infant mortality. Factors which determined this choice were its location within the birth-registration area, a large foreign group constituting over one-third of the city's entire population, and a population of sufficient size¹ to offer a base large enough to permit accurate deductions from the tabulation of facts secured from the investigation. Moreover, in contrast to some of the other places selected, it had but a small proportion of married women engaged in work outside their homes, and its chief industry, brass manufacturing, had not been represented in the cities previously studied.

The infant mortality rate in Waterbury since 1910 has fluctuated between 134 in 1911 and 174.1 in 1913, with an average of 146.5 for the five-year period.

¹ U. S. Bureau of the Census Bulletin 133, estimated population 1914, 82,517.

TABLE I.—*Live births, infant deaths, and infant mortality rates for five years, 1910–1914.*^a

Year.	Live births.	Infant deaths.	Infant mortality rate.
1910.....	2,150	320	148.8
1911.....	2,164	290	134.0
1912.....	2,210	303	137.1
1913.....	2,171	278	174.1
1914.....	2,241	311	138.8

^a Connecticut Vital Statistics, 1910, 1911, 1912, 1913, 1914.

The latest census figures show it to have been 143 in the calendar year 1915,¹ while that for the entire birth-registration area of the United States for the same year was 100. Waterbury's rate was not only higher than the average for the entire birth-registration area in that year, but was higher than the rate in any other town or city in Connecticut and higher than the rate in all but 26 of the 250 cities reported in the birth-registration area.

HISTORY.

Waterbury was settled in 1677. Sometime later a committee of the colonial government estimated that the territory including what is now Waterbury, Watertown, Plymouth, parts of Middlebury, Oxford, and Prospect "might comfortably support 30 families," an estimate obviously based on the assumption that in spite of the hilly and rocky character of the district it was to be an agricultural community. In 1910 Waterbury alone had within its boundaries 14,556 families.² It was organized as a borough in 1825 and chartered as a city in 1853. In 1910 it was the fourth largest city in Connecticut, having, according to the Federal census of that year, a total population of 73,141. Of this number 24.9 per cent were native white of native parents, 39.1 per cent native white of foreign or mixed parents, 34.9 per cent foreign-born white, and only 1.1 per cent colored.

Waterbury is the largest brass and copper manufacturing city in the United States. In 1909 it ranked third in the State in the total value of manufactured products. Since becoming a manufacturing center and especially since 1850 the growth of Waterbury has been remarkable, the population increasing from 5,137 in 1850 to 73,141 in 1910.

This increase in population was due in great part to the large influx of immigrants drawn by the demand for workers in the factories. The order of their coming corresponds closely to the order in which the various nationalities have been added to the United

¹ U. S. Bureau of the Census, Birth Statistics, 1915, p. 10.² U. S. Census 1910, Population, Vol. II, p. 257.

States as a whole—the English and Irish, followed by the German and French, and later by the Italian, Austro-Hungarian, and Russian. In 1910 there were 25,498 foreign-born white in Waterbury, representing at least 23 countries; the most important groups, numerically, are shown in the following statement, which for purposes of comparison includes the figures for 1900:

Country of birth.	1910 ^a	1900 ^b	Country of birth.	1910 ^a	1900 ^b
Austria.....	422	113	Ireland.....	5,838	5,866
Canada, French.....	1,901	1,777	Italy.....	6,567	2,007
Canada, other.....	401	489	Russia.....	5,600	1,265
England.....	1,175	938	Scotland.....	525	386
France.....	228	149	Sweden.....	624	397
Germany.....	1,433	1,195	Other foreign countries.....	784	782

^a U. S. Census 1910, Population, Vol. II, p. 256.

^b U. S. Census 1900, Population, Vol. I, Part 1, pp. 800-803.

The greatest recent immigrant growth has been in the Italian and Russian groups. The Italians first appeared in Waterbury about 1870; in 1900 they numbered 2,007 and increased to 6,567 in the next 10 years. They now form the largest foreign group in the city, outnumbering even the Irish, who in 1900 equaled more than twice the population of any other foreign group. The latter have remained practically stationary in number since 1900 and are now the second foreign group in size. The third most important foreign group is the Russian, which includes Lithuanians, Russian Poles, and Russian Jews, by far the greatest number being Lithuanians, the first of whom came to Waterbury in 1890.

The city is divided into five wards, each of which radiates from the center and includes business, residential, and rural sections. The Naugatuck River runs south through the city a little to the west of the center, separating practically all of ward 3 and half of ward 4 from the other wards. The flat land, which forms the Naugatuck Valley, was the natural selection for the location of the homes of the workers in the manufacturing plants located along the stream. An increasing number of shops and factories and their attendant industries necessitated the growth of the business section of the city, thereby decreasing the amount and increasing the value of valley land available for home sites. In time this pressure of land values began to force the population up the surrounding hills where the problem of congestion is as yet unknown, although inadequate water supply, sewage disposal, and transportation are serious obstacles to proper living.

METHOD OF INQUIRY.

In accordance with the plan determined upon by the Children's Bureau for all infant mortality inquiries, the primary basis of selection was to be registered births, but the fact that there were comparatively few infants of Lithuanian mothers registered made it seem advisable to make a house-to-house canvass as a check on the completeness of birth registration in Waterbury. This canvass, supplemented by comparison with baptismal records, death certificates, and records of social agencies, disclosed 329¹ unrecorded live births, representing 12.8 per cent of all live births in the city for the 12 months under consideration. Of these unrecorded live births, 222 were of children of foreign-born mothers, 171, over one-half, occurring to Lithuanian mothers. Although constituting but 18.1 per cent of all births to foreign-born mothers, and 12.2 per cent of the births to all mothers considered in the detailed study, the Lithuanians had the highest infant mortality rate of any nationality.²

Waterbury was officially unaware of the existence of at least 12.8 per cent of its accessions by birth, unless death and need for a burial permit secured registration of the fact that these infants had been for a time part of a community which cared too little for their welfare even to register their arrival. Fifty-two, or 15.8 per cent, of the 329 live-born babies whose births were unregistered were recorded only in the death records of Waterbury. Thirty of these 52 deaths were of Lithuanian babies, the group having the highest infant mortality rate from all causes, and more important still, the largest proportion from preventable causes. The per cent distribution of unregistered live births according to nationality of mother is shown in Chart I.

Of the 329 cases not registered, failure to report was attributable in 11 or 3.3 per cent to hospitals, in 38 or 11.6 per cent to private physicians, and in 156 or 47.4 per cent to midwives. In the remaining 124, representing 37.7 per cent of the unregistered births, either there was no recognized attendant or information regarding the attendant was not secured. Often the unlicensed midwives had physicians sign as the attendant at birth, and of the births found to be attended by midwives who had no supervision of any kind a large proportion were not registered at all. Some midwives were regularly failing to report their cases, only a very small number of births attended by them being recorded.

The initial fault lies in the failure to enforce the State law of Connecticut for the registration of births and deaths. The law³ pro-

¹ General Table 1.

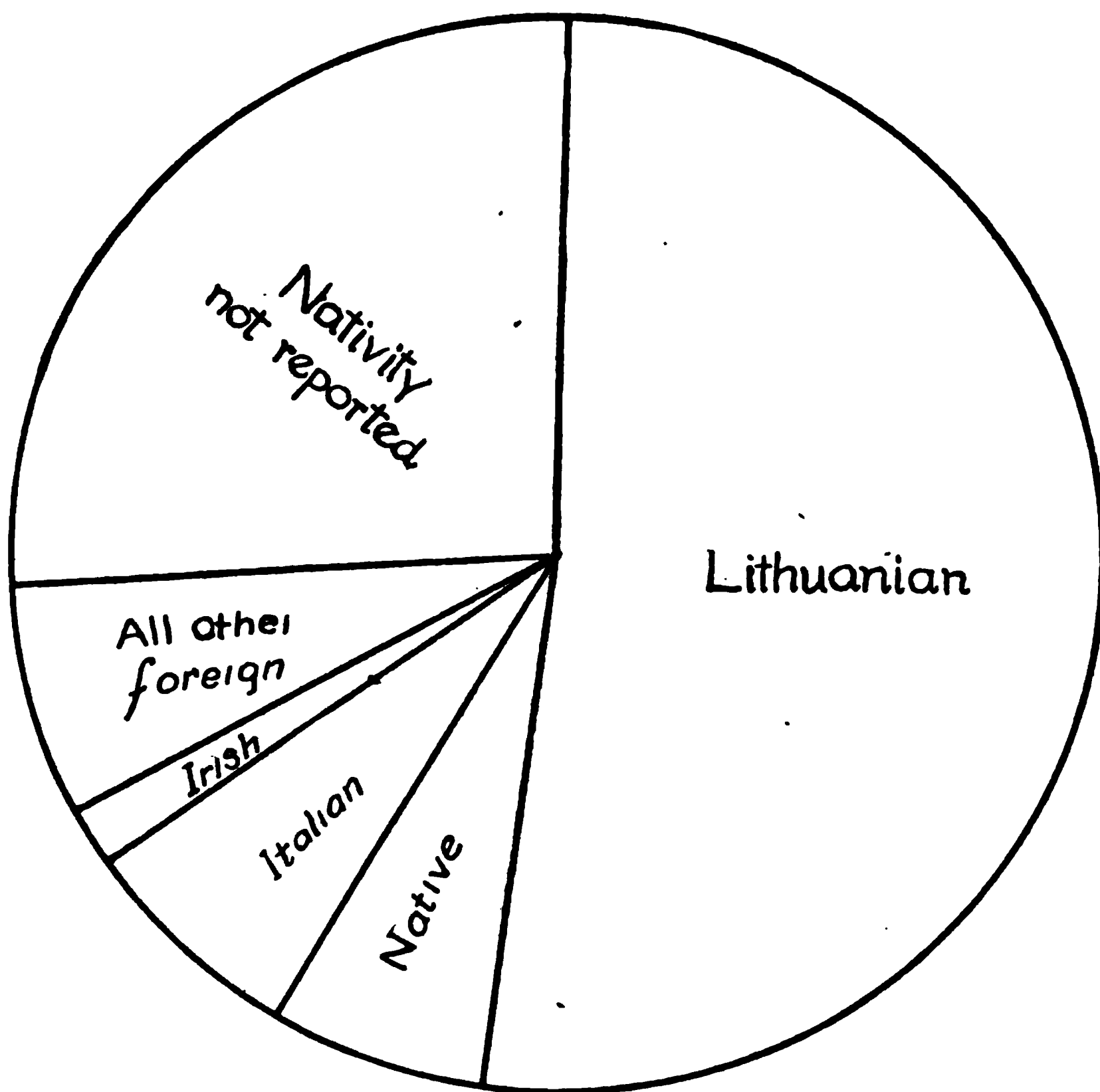
² General Table 2.

³ A Manual of Statutes of Connecticut relating to the Public Health and Safety, 1902, secs. 1861, 1870, 4714, 4715, and 4719.

vides (1) that all persons acting as paid attendants at the birth of a child must be regularly licensed practitioners; (2) that the fact of the birth must be reported in writing to the local registrar not later than the first week of the month succeeding the birth; and (3) appropriate penalties for failure to observe the above provisions of the law.

The law is weak in that it permits a perilously long period to elapse between the date of birth and the date of registration, and it makes

CHART I.—PER CENT DISTRIBUTION OF UNREGISTERED LIVE BIRTHS, ACCORDING TO NATIONALITY OF MOTHER.



scant provision for enforcement. That the law has not proved effective, in at least some sections of the State, is shown by the fact that in 1912 the county health officer of New Haven County in his report to the State board of health stated:¹

Investigations made in the city of Waterbury during the past summer showed that more than 50 per cent of the births occurring among the families of some of the foreign population were never returned to the registrars of vital statistics. This must be overcome in some way, as it destroys the accuracy of all of the vital statistics of the State.

¹ Report of State Board of Health, 1911-12, p. 84.

As shown by the Children's Bureau canvass, the registration is still incomplete. If it is to be made satisfactory, prompt registration of births should be one of the recognized duties of physicians, midwives, or other persons called upon to fill the position of attendant at birth. Immediate and persistent prosecution for failure to report the births would prove a most effective method of improving birth registration and would serve also to eliminate from practice those who at present are practicing without licenses.

The preliminary work of the Waterbury investigation was begun in April, 1914. This consisted of copying the names, addresses, and other information contained in the birth certificates on file at the city hall for all babies born during the period commencing June 1, 1913, and ending May 31, 1914. These 12 months were selected because they constituted the most recent 12-month period which would permit all the babies to have lived at least one year before being visited. In addition to transcribing the city records to the uniform schedules upon which the facts gathered in the course of the inquiry were to be entered, a schedule was filled out for every unregistered baby for whom was found a baptismal record or a record with some social agency or institution.

Information from the death certificates on file was copied on the schedules already made out from the birth certificates for all babies whose birthplace was given as Waterbury, Conn.; for 52 no birth certificates were found. Schedules were therefore filled out from the death certificates as they had been from baptismal records and the records of social agencies. These schedules were assigned to the agents, who called not only at the addresses secured as indicated but at every house in the city to make inquiries concerning all births and infant deaths which had occurred during the selected period.

The information called for by the schedule was secured through personal interviews of individual mothers by the woman agents. The study was absolutely democratic; the mother of every baby born in the year selected, whether rich or poor, native or foreign born, was sought. As the text shows, certain facts regarding the civic surroundings of the families were secured in addition to the data from interviews, but the chief value of the inquiry lies in the information afforded by the mothers.

While the preliminary clerical work was in progress the people of Waterbury were being made familiar with the purpose and plan of the investigation. The unfailing cooperation so generously given throughout the inquiry by the entire city of Waterbury, through its public officials, institutions, private organizations, press, clergy, and various other representatives, is responsible in large measure for the success of the inquiry.

In every section of the city the agents of the Federal Children's Bureau found evidences of the intelligent manner in which Waterbury had spared the mothers for the visits of the Government agents. As the Children's Bureau has no power to compel answers, all information secured must be given willingly. It is therefore a great tribute to the constructive interest of Waterbury mothers that of the 2,197 mothers visited not one refused the information upon which the report is based.

ANALYSIS OF MATERIAL.

MATERIAL CONSIDERED.

This investigation considers all live-born and all stillborn infants of 7 or more months' gestation, registered and unregistered, born in the city during the 12 months selected (June 1, 1913, to May 31, 1914) whose families lived in the city with the baby for at least 9 months of the baby's first year and for whom accurate records could be obtained.¹

WARD DISTRIBUTION.

The distribution of the 2,144 live-born infants and the deaths of 263 of the group who died before reaching 1 year of age is shown on the map facing this page. A large number of infant deaths in a certain section does not necessarily indicate a high infant mortality rate for that section. Therefore the insert map showing the rates by wards must be considered in connection with the spot map in order not to give undue weight to numerous infant deaths in densely populated areas.

To consider the infant mortality rate for the city as a whole obscures the fact that the rates for certain sections within the city may be much higher or much lower than the rate for the entire city. It might be expected that in a city like Waterbury, where the wards radiate from the center of the city, ward rates would be similar on account of the inclusion of a sample of every variety of neighborhood within the boundaries of each ward, from the congested section near the heart of the city to the rural areas at the edge. But rates varying from 150.1 in the fourth ward to 70.6 in the second ward are shown in Table II which presents the distribution of births and infant deaths together with the infant mortality rate for each of the wards.

¹ Four hundred and fifty-seven births were excluded from the detailed study for the following reasons: Two hundred and sixty-three mothers moved from Waterbury before the end of the baby's first year or spent the greater part of the year outside of the city; 49 mothers (termed "nonresidents") came to Waterbury to avail themselves of its hospital service and returned to their homes outside the city shortly after confinement; in 3 cases the information regarding the baby was given by some person other than the mother and there seemed reason to doubt its authenticity; 12 schedules for infants of unmarried mothers were excluded on the ground that there was no family group; 12 schedules for miscarriages were excluded, as the study is confined to live births and stillbirths that have resulted from at least 7 months' gestation, and 118 could not be located. These 118 births constituted only 4.4 per cent of the 2,654 names secured, although in many instances the visits to the homes were not made until 2 years after the birth of the child concerning whom the information was sought.

TABLE II.^a—*Live births during selected year, infant deaths, and infant mortality rate, by ward of residence.*

Ward of residence.	Total live births.	Infant deaths.	Infant mortality rate.
The city.....	2,144	263	122.7
Ward:			
1.....	451	63	139.7
2.....	326	23	70.6
3.....	482	51	105.8
4.....	573	86	150.1
5.....	312	40	128.2

^a General Table 3.

A partial explanation of the varying rates is indicated by Chart II, which brings out the fact that in all wards but the second the births to foreign-born mothers greatly outnumbered those to the native mothers. Of the foreign-born mothers the bulk of the Italians were found in wards 4, 3, and 1, given in order of importance; the Lithuanians in wards 3 and 4, and the Irish in wards 5 and 4.

TABLE III.—*Births during selected year in each ward of residence according to nationality of mother.*

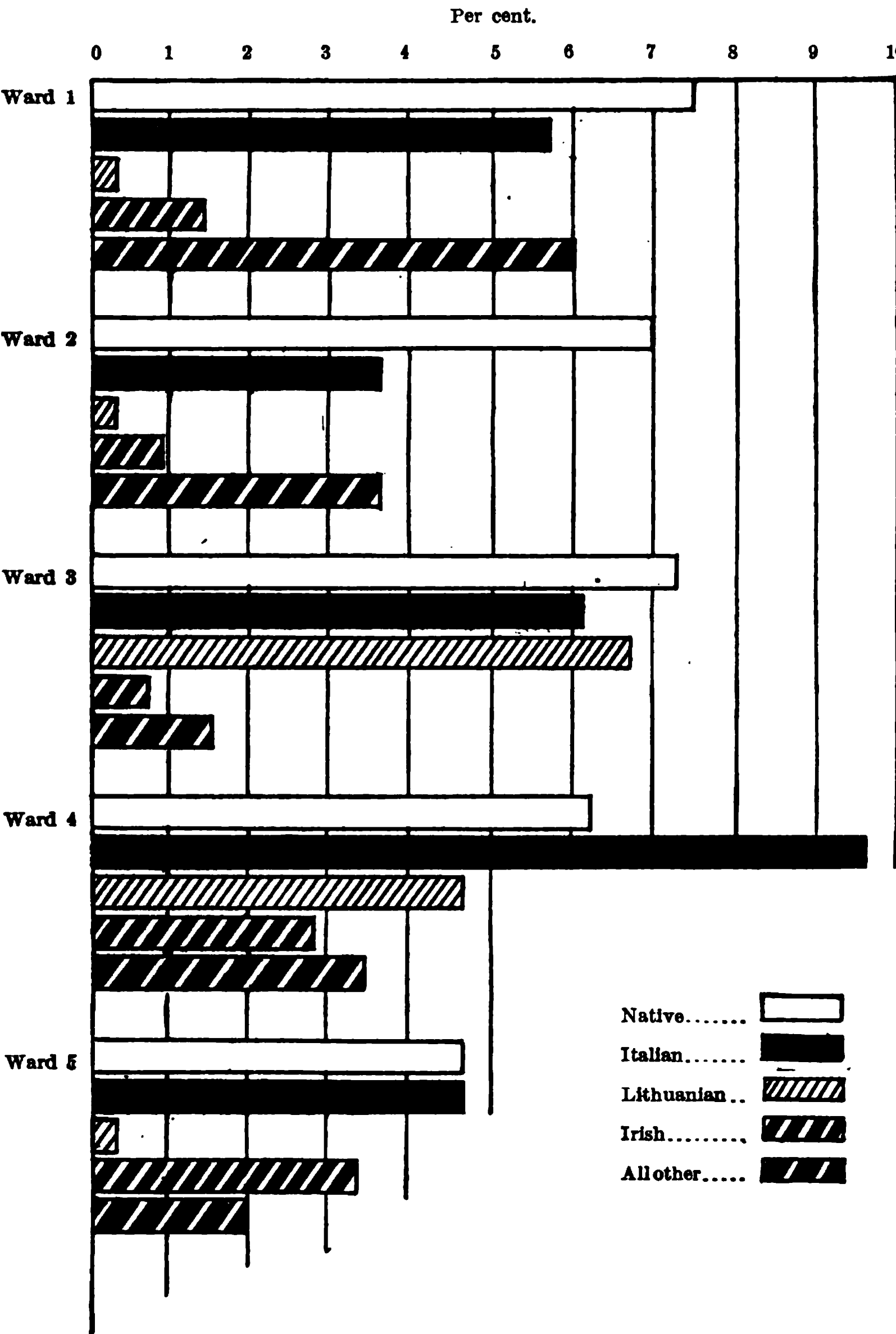
Nationality of mother.	All wards.		Ward of residence.									
			1		2		3		4		5	
	Live births.	Stillbirths.	Live births.	Stillbirths.	Live births.	Stillbirths.	Live births.	Stillbirths.	Live births.	Stillbirths.	Live births.	Stillbirths.
All mothers.....	2,144	53	451	9	326	10	482	11	573	12	312	11
Native mothers.....	705	13	163	2	147	7	160	1	136	1	99	2
Foreign-born mothers.....	1,439	40	288	7	179	3	322	10	437	11	213	9
Italian.....	628	23	121	5	77	2	129	6	203	8	98	2
Lithuanian.....	260	7	6	.....	5	1	145	3	98	3	6	.....
Irish.....	195	5	31	.....	19	.....	15	.....	62	.....	68	5
Slavic ^a	89	2	36	1	20	.....	2	.....	20	.....	11	1
Jewish.....	60	1	39	1	15	.....	4	.....	1	.....	1	.....
German.....	57	1	18	.....	17	.....	10	1	10	.....	2	.....
French Canadian.....	56	.....	7	.....	6	.....	2	.....	28	.....	13	.....
English, Scotch, and Welsh ^b	40	.....	11	.....	9	.....	5	.....	8	.....	7	.....
All other ^c	54	1	19	.....	11	.....	10	.....	7	.....	7	1

^a Including 65 Polish, 20 Russian, 2 Slovak, 2 Bohemian, 1 Serbo-Croatian, and 1 Ruthenian.
^b Including 18 English, 21 Scotch, and 1 Welsh.
^c Including 29 Scandinavian, 7 English Canadian, 6 French, 5 Magyar, 3 Syrian, 2 Greek, 1 Dutch, 1 Spanish, and 1 West Indian Black.

Throughout this report, with the exception of the special housing section, the nationality of the mother rather than that of the father has been shown, because it is believed that in those cases in which the parents are of different nationalities the customs and traditions of the mother determine the character of the care given the infant. This procedure affects only 12.9 per cent of the total 2,197 cases, as for 1,911, or 87 per cent, the nationality of the parents was the same.¹

¹ General Table 4.

CHART II.—PER CENT DISTRIBUTION OF BIRTHS, ACCORDING TO WARD OF RESIDENCE AND NATIONALITY OF MOTHER.



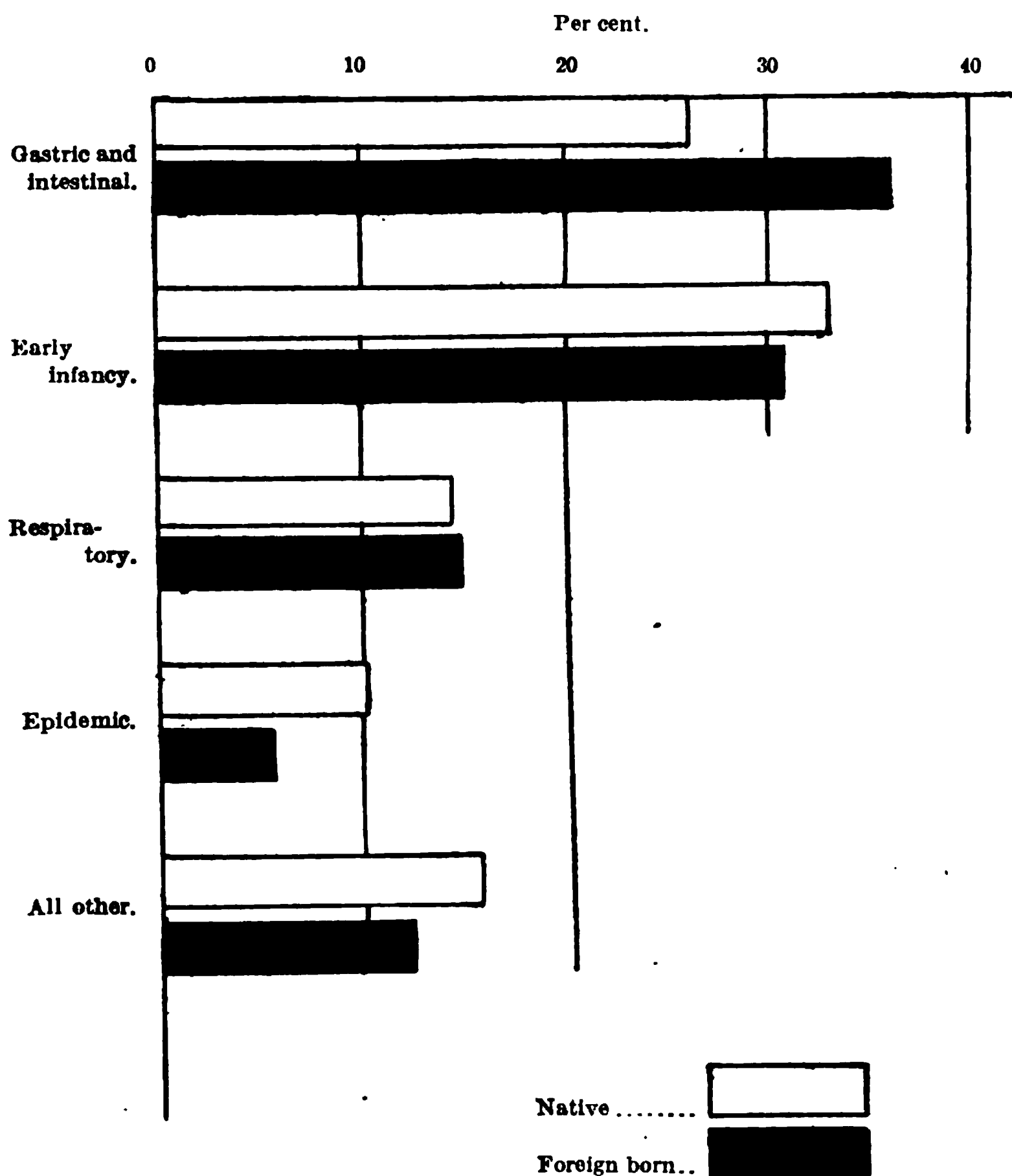
MEDICAL CAUSE OF DEATH.

The medical cause of death is the immediate cause only. Correctly speaking, it is not only a cause but also a result—the result of improper economic and social conditions. The discussion of any one of the group of diseases shown in Chart III necessitates the consideration of factors responsible for the creation of the disease. Congenital debility suggests improper care or illness of the mother during the period of gestation; diseases of nutrition and gastric and intestinal diseases point to improper care of the infant, particularly in the matter of feeding, although hot weather or infection and a defective digestive tract may also be responsible. These causes in turn may be affected by such factors as insufficient income, improper housing conditions, employment of the mother, or ignorance or indifference on the part of the caretaker of the infant. In considering the tables presented in this report the reader must constantly bear in mind that, though the infant mortality rate may be shown to vary with variations in some one factor, the inference that the factor is a direct or sole cause is not always warranted; the nature of the facts and the interrelation of the various factors considered may prohibit the inference of too close a relationship.

All causes.¹—The most important causes of infant deaths in Waterbury are the group of gastric and intestinal diseases, which caused over one-third of all infant deaths. Second in importance are the deaths from premature birth, congenital debility, injuries at birth, etc., included under the group heading “Early infancy.” Almost one-third of the deaths were due to this cause. Third in order are respiratory diseases, causing 14.8 per cent of all infant deaths.

¹ Principal causes of death for infants under 1 year according to classification by United States Bureau of the Census for deaths during this period. (Mortality Statistics, 1914, p. 660.) The term “gastric and intestinal diseases,” as used in the tables and discussion, includes only the diseases of this type which are most important among infants, i. e., diseases of the stomach, diarrhea, and enteritis. It does not include all “diseases of the digestive system” as classified under this heading according to the detailed International List of Causes of Death. Respiratory diseases, similarly, includes only those of the respiratory diseases which are most important among infants, i. e., acute bronchitis, broncho-pneumonia, and pneumonia. It does not include all “diseases of the respiratory system” as classified under this heading according to the detailed International List. Epidemic diseases includes only those of this group which are most important among infants.

CHART III.—PER CENT OF INFANT DEATHS DUE TO SPECIFIED CAUSES, ACCORDING TO NATIVITY OF MOTHER.



The proportion of deaths from each group of causes in Waterbury during the selected year as compared with that in the registration area in 1914 is shown in Table IV. Waterbury's per cent distribution of deaths was lower than that for the registration area in every group of diseases except that from gastric and intestinal diseases, for which group it had a percentage 9.2 higher than that for the registration area.

TABLE IV.^a—Per cent distribution of deaths among infants born in Waterbury during selected year and of infant deaths in the registration area in 1914, by cause of death.

Cause of death.	Waterbury.	Registration area.
All causes.....	100.0	100.0
Gastric and intestinal diseases.....	33.5	24.3
Respiratory diseases.....	14.8	15.5
Malformations.....	3.8	6.2
Early infancy.....	31.6	33.9
Epidemic diseases.....	6.8	8.2
External causes.....	.4	1.2
Diseases ill defined or unknown.....	1.5	1.0
All other causes.....	7.6	8.7

^a General Table 5.

Gastric and intestinal diseases.—Gastric and intestinal diseases, the group causing the greatest number of infant deaths in Waterbury, are largely preventable, yet they were responsible for 88 or one-third of all infant deaths in Waterbury, a proportion greatly in excess of that for the registration area. Diseases of the intestinal tract can in most cases be traced to some combination of summer heat, unhygienic surroundings, and improper care such as unsuitable feeding or neglect. These in turn may be conditions fostered by ignorance and poverty. It follows that a program for the prevention of gastric and intestinal diseases must include provision of adequate incomes for proper family life and education of the mother which will insure intelligent care for the infant.

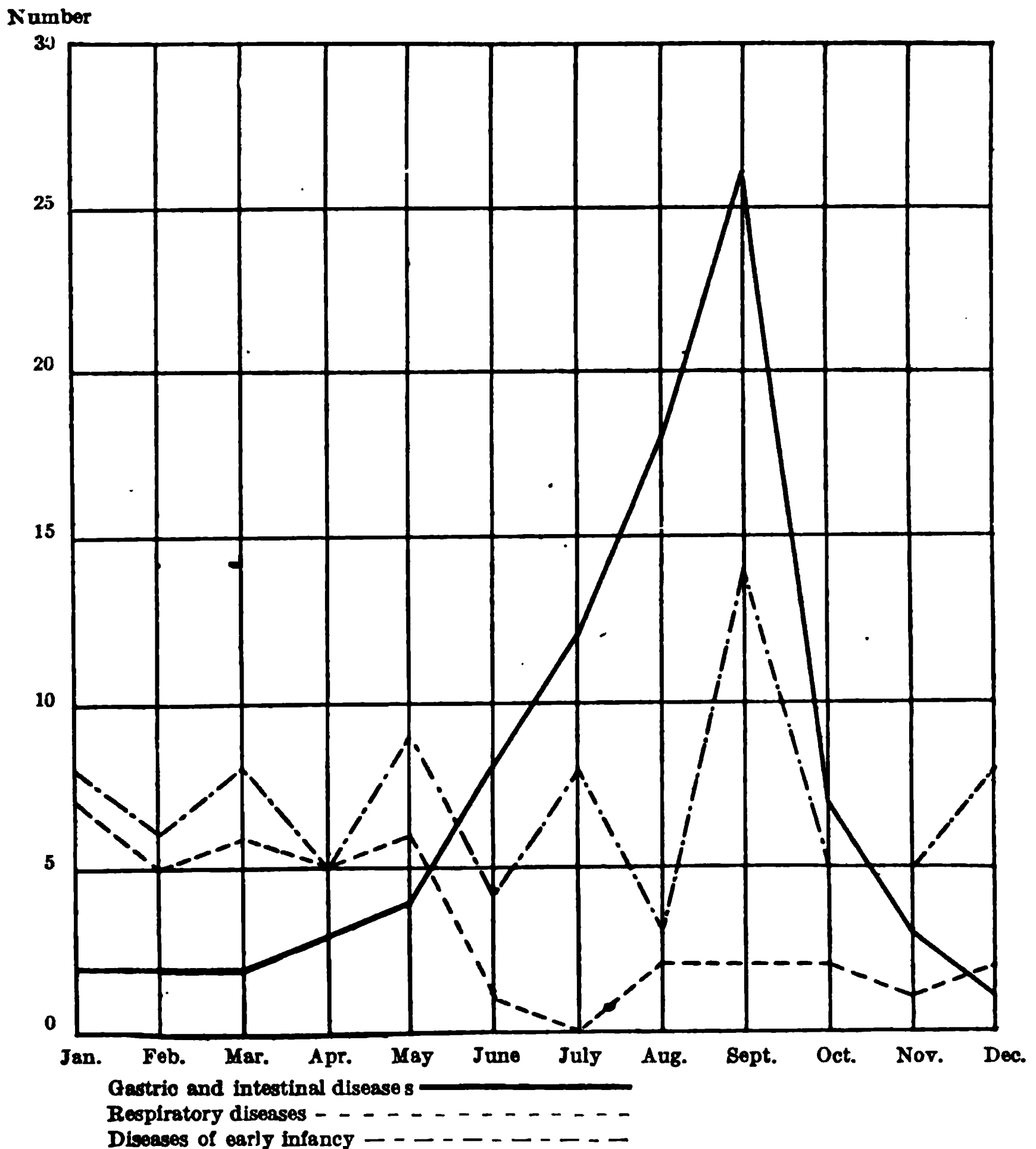
Although births to Lithuanian mothers constituted only 12.2 per cent of all births, the infants of this group contributed 20.5 per cent of all infant deaths and 30.7 per cent of infant deaths from gastric and intestinal diseases. More significant still, one-half of all the Lithuanian infant deaths resulted from these diseases.

TABLE V.—Total deaths among infants born in selected year and number and per cent of deaths from gastric and intestinal diseases, according to nationality of mother.

Nationality of mother.	Infant deaths.	Deaths from gastric and intestinal diseases.	
		Number.	Per cent.
All mothers.....	263	88	33.5
Native mothers.....	69	18	26.1
Foreign-born mothers.....	194	70	36.1
Italian.....	69	21	30.4
Lithuanian.....	54	27	50.0
Irish.....	36	12	33.3
All other.....	35	10	28.6

Heat.—The most striking fact about deaths from gastric and intestinal diseases is the marked increase in number during the summer months. The small number of deaths from this cause during the winter months, the rapid increase throughout the summer, culminating in September, and the sudden drop in October, are shown in Chart IV.

CHART IV.—DEATHS FROM SPECIFIED CAUSES BY CALENDAR MONTH OF DEATH.



The sudden increase in September is no doubt due in part to the cumulative effect of the summer heat, which in 1913 was sustained for a long period, as shown in the following tabular statement. The effects of heat are increased by poor ventilation and improper surroundings within the home, making the infant an easy prey to all diseases which affect the intestinal tract.

Temperature and precipitation for Waterbury, Conn., during the period of the investigation.

[Furnished by the Weather Bureau, U. S. Department of Agriculture.]

	Temperature.			Precipitation.		Temperature.			Precipitation.
	Mean.	Maximum.	Minimum.			Mean.	Maximum.	Minimum.	
1913.	° F.	° F.	° F.	Inches.	1914.	° F.	° F.	° F.	Inches.
June.....	67	92	38	3.31	January.....	28	55	-10	3.87
July.....	73	97	45	1.36	February.....	22	53	-11	3.10
August.....	71	96	44	2.93	March.....	35	72	12	6.09
September.....	62	88	33	3.37	April.....	46	83	21	3.87
October.....	57	80	30	8.83	May.....	61	94	31	2.81
November.....	44	70	24	2.92					
December.....	35	57	11	2.84					

Improper feeding.—An important cause of gastric and intestinal diseases is improper feeding. A comparison by nationality of the percentage of artificially-fed infants at the end of the first 3 months, 6 months, and 9 months of life with the per cent of infant deaths from gastric and intestinal diseases for the same nationalities, shows that among infants of foreign-born mothers the percentage of deaths increases with the proportion of infants artificially fed.

Poverty.—That the native mothers constitute the only group with the coincidence of a high percentage of artificial feeding and a low percentage of infant deaths from gastric and intestinal diseases is shown graphically in Charts Va and Vb.

CHART VA.—PER CENT OF ARTIFICIALLY-FED INFANTS SURVIVING AT AGE SPECIFIED, ACCORDING TO NATIONALITY OF MOTHER.

ERRATA.

Page 31:

The heading to Chart Va should read: Per cent artificially fed of infants surviving at age specified, according to nationality of mother.

Chart Vc should read: Vb.

77449—18

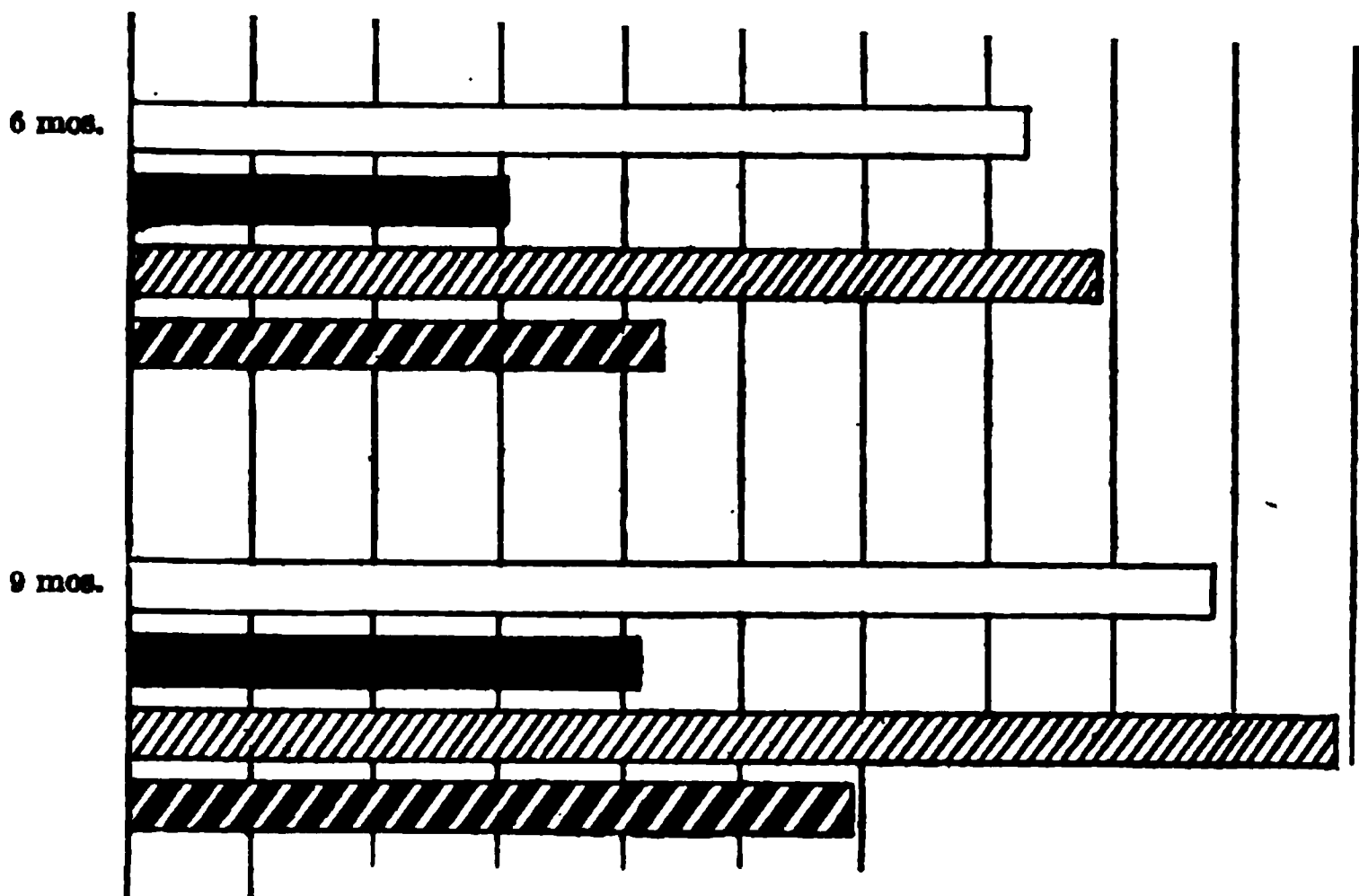
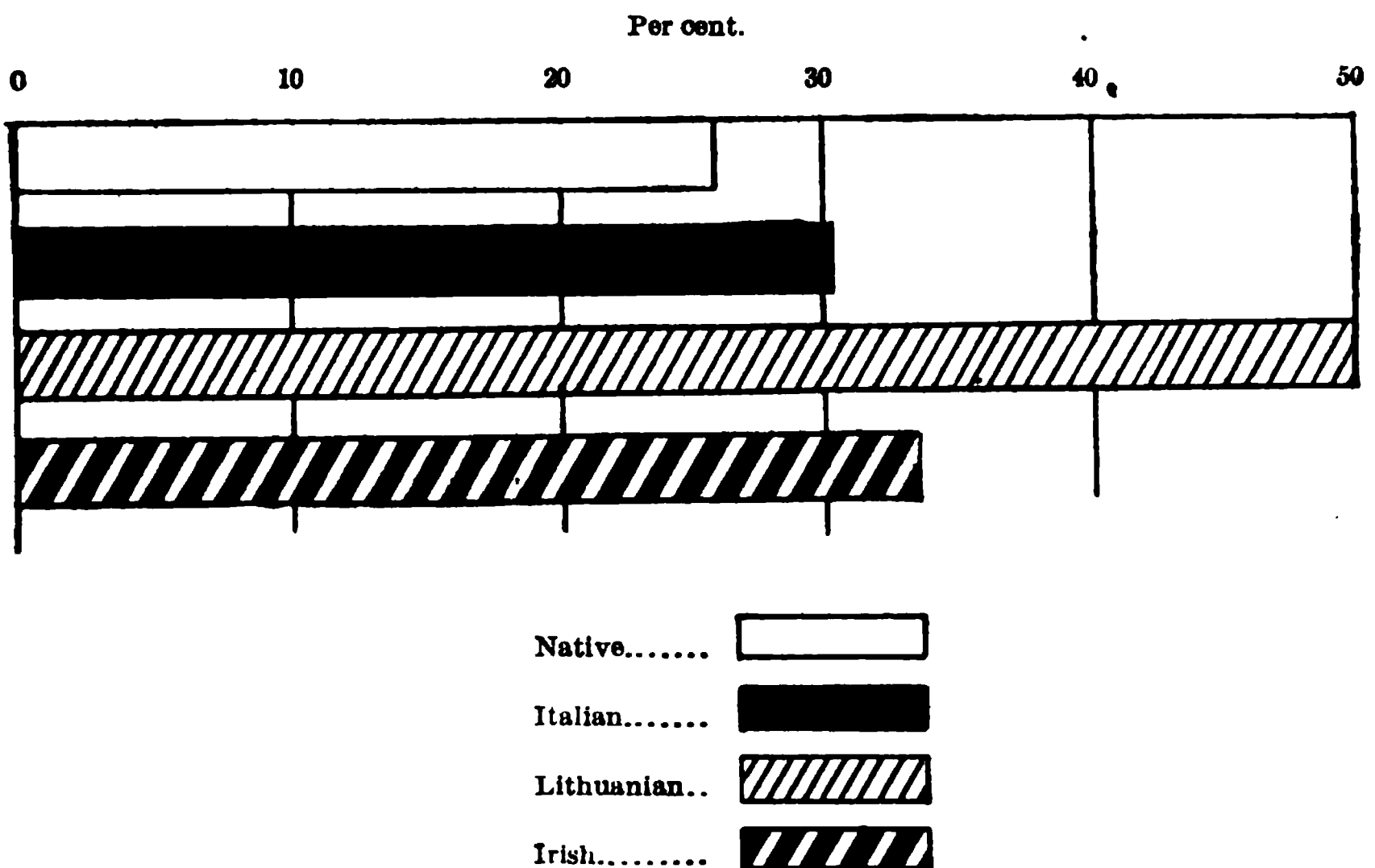


CHART Vc.—PER CENT OF INFANT DEATHS CAUSED BY GASTRIC AND INTESTINAL DISEASES, ACCORDING TO NATIONALITY OF MOTHER.



Safety in the use of artificial feeding is greatly increased by proper and intelligent care. Such care depends not only upon the intelligence of the mother, but also upon her financial ability to provide proper food and competent medical supervision. The influence of income on the survival of artificially-fed infants is discussed in the section on feeding.¹

Consideration of the foreign-born groups shows most strikingly that increased income alone will not assure safety to the artificially fed infants.

The highest percentage of deaths from gastric and intestinal diseases among all artificially-fed infants was found among the Lithuanians, the group with the lowest earnings; the second highest percentage of infant deaths from these causes occurred among the Irish, although their incomes from fathers' earnings were exceeded only by those of the native families. In the native groups there existed a coincidence of high incomes, extensive artificial feeding during the early part of the infants' first year, and a low percentage of deaths from gastric and intestinal diseases. It should also be taken into consideration here that the native mothers had much smaller families than did the foreign born, so that even the native families in the lowest income group enjoyed a better standard of living than the foreign-born families in the same group.

Ignorance.—A primary cause to which but slight recognition has been given is the fatalistic acceptance of the deaths of their children by a large number of the foreign-born mothers. Many of the Lithuanian mothers of Waterbury exhibited a striking lack of knowledge of the causes from which their babies died and seemed surprised that anyone should think it possible to prevent the deaths of those ordained to die in infancy. Even those mothers who knew the causes were ignorant of the fact that many of these deaths were preventable. One Lithuanian mother lost 5 of her 11 children before they had lived 10 months and 4 had died of "stomach trouble." The death certificate for the last baby showed "acute colitis" as the cause of death. The mother's custom was to give the newborn baby the bottle at his first feeding, but she did not associate this with the "stomach trouble" so common to her children. A Lithuanian mother who had lost 5 of her 8 children in early infancy knew that 2 died as the result of diarrhea and another from an unknown cause; 2 she stated "were always weak." The death certificate for one of these stated "malnutrition—improperly modified milk." This mother, too, fed her babies artificially from the first. Another Lithuanian mother stated that 4 of her 9 children died before reaching 6 months of age, 3 of them from diarrhea, and the last from a severe cold. But the death

¹ See p. 55.

certificate for the last baby showed "bronchitis and malnutrition." An Italian mother who had had 14 pregnancies, stated that 2 were miscarriages, 1 died as the result of bronchitis, 3 from unknown causes, and 5 because they had been "bewitched." The death certificate for the last baby who had been "bewitched" showed the cause of death to be "acute gastroenteritis."

The other foreign-born groups and the native mothers also showed need for education in matters of child hygiene, particularly in regard to diseases of the intestinal tract, which are so largely preventable.

Causes of death peculiar to early infancy.¹—Diseases of early infancy are second in importance among the causes of infant mortality in Waterbury and are responsible for a higher percentage of the deaths among infants of native mothers (33.3) than among those of foreign-born mothers (30.9).

The Report of the Medical Officer of Great Britain's Local Government Board records:

Of the total deaths of infants in the first year after birth, about one-fifth occur in the first week after birth, one-third in the first month after birth, and over one-half in the first three months after birth. Nearly all the deaths in the first week and most of the deaths in the first month of life are attributable to antenatal and natal conditions.²

In Waterbury 31.6 per cent of all infant deaths were due to conditions existing before the birth of the child or of injury and accident at birth; of those that died under 2 weeks, 72.7 per cent died from these causes.

How many of these deaths in early infancy might have been prevented can not be estimated, but experiments in this direction have proved conclusively that adequate prenatal care will prevent a large proportion. Such care involves education of the prospective mother in proper care of herself during pregnancy, supervision of the patient throughout pregnancy by a skilled obstetrician, together with proper nursing care and adequate obstetrical service at the time of confinement. Such care is beyond the means of many Waterbury women. Poverty necessitates economy in the amount and variety of food, often makes it impossible for the prospective mother to discontinue work until labor pains actually commence, prohibits any medical attention which she feels is not absolutely necessary, and cuts her off in every conceivable way from the care which she should have if she is to bear healthy, live-born children with the least danger and discomfort to herself.

The establishment of free or moderately priced adequate prenatal and confinement service for those women who otherwise could have

¹ The term "causes of death peculiar to early infancy" as used in the tables and discussion includes those deaths due to premature birth, congenital debility, and injuries at birth.

² Report Medical Officer, Great Britain's Local Government Board, 1913-14, p. XXXIII.

no supervision during pregnancy would save many infant lives to the community and would reduce materially the enormous amount of unnecessary suffering which at present causes many women to face approaching motherhood with dread and despair.

Principal respiratory diseases.—Respiratory diseases were responsible for 14.8 per cent of the 263 infant deaths considered in this report, ranking third in importance as a cause of infant mortality.¹ This proportion does not differ greatly from the corresponding figure (15.5) for the entire registration area for 1914. In Waterbury the percentage of deaths from this cause among infants of native mothers was practically the same as that among infants of foreign-born mothers, being 14.5 per cent for the former and 14.9 per cent for the latter.

The months January to May, inclusive, registered the greatest number of deaths from respiratory diseases, as shown by Chart IV.² In general, deaths from these diseases have been found to be most common in late winter and in the spring; the seasonal incidence is due, it is generally agreed, to increased danger from infection caused by inadequate house ventilation during the colder months.

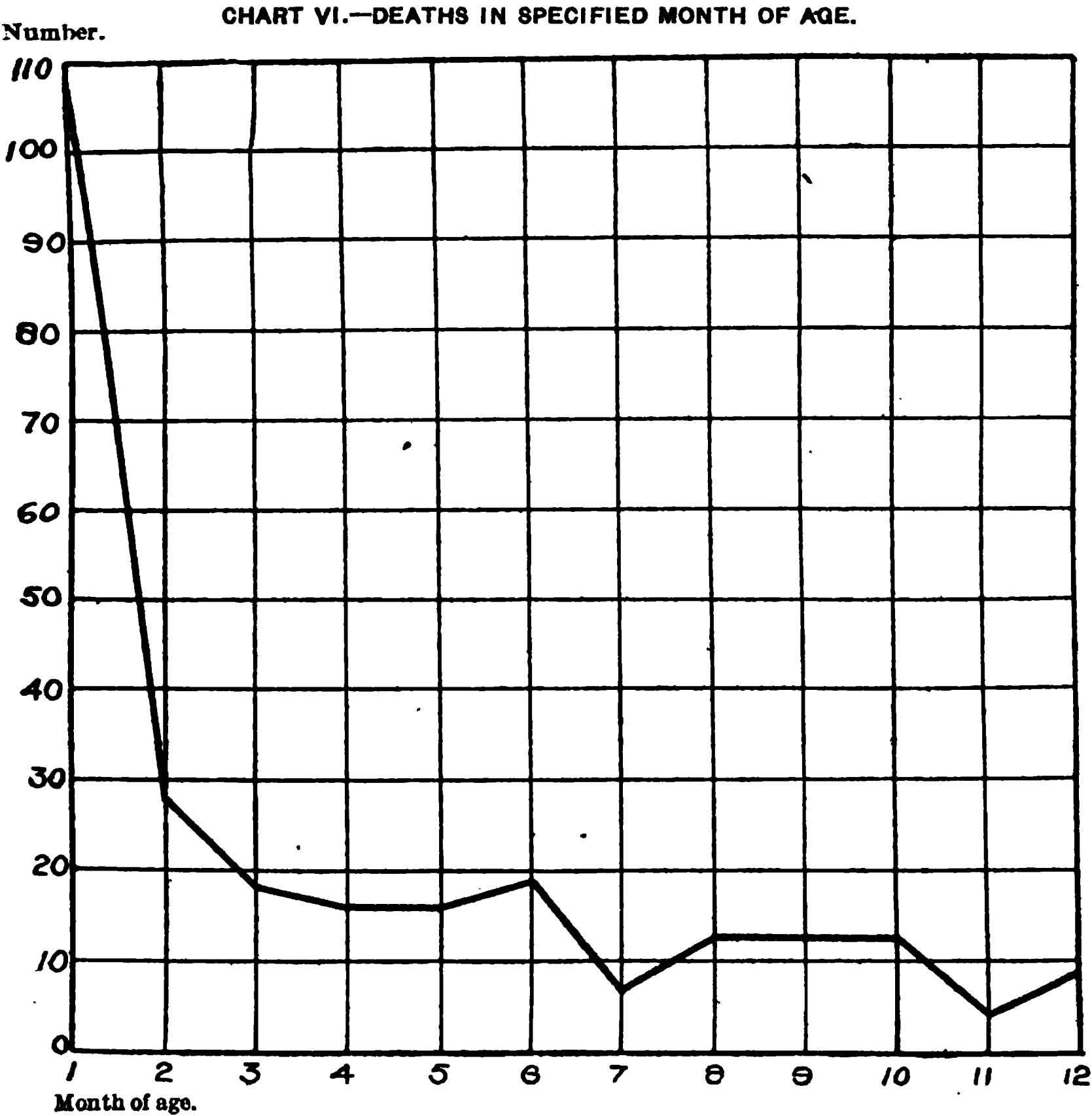
Results of recent experiments indicate that here, too, the education of the mother is the foundation upon which to build. She must be taught that breast milk and fresh air in adequate amounts afford protection against these diseases; that they are infectious and the baby must therefore be kept away from persons suffering with colds, and that respiratory infections in the infant must receive early treatment under the direction of a competent physician. But preventive work is still in the experimental stages and so far but slight progress has been made.

¹ See Chart III, p. 27.

² See Chart IV, p. 29.

AGE AT DEATH.

The first few days and weeks of life are by far the most hazardous, due in large measure to prenatal conditions. Prenatal conditions largely influence the health of the infant after birth, and the nine months of gestation should be recognized as months of preparation for the difficult adjustment which the infant must make during the first few weeks of life. Proper attention to the importance of this period would prevent not only many of the early deaths but much of



the illness of childhood and consequent handicaps throughout life. The hazards of these first months of life are clearly shown in Chart VI; 88¹ of the 263, a little over one-third of the total infant deaths for the 12 months under consideration, occurred before the end of the second week of life; 107 or 40.7 per cent during the first month; 135 or 51.3 per cent in the first two months; and 153 or 58.2 per cent, well over one-half, took place before the end of the third month of life.

¹ General Table 8.

The corresponding figures for the entire registration area of the United States during the year 1914, as shown in Table VI, were 45.5 per cent under one month, 54.7 per cent under two months and 62.3 per cent under three months of age.

The fact that the percentage of deaths from diseases of early infancy is lower for Waterbury is probably due to the high percentage of deaths from gastric and intestinal diseases, the greater number of which occurred after the third month of the child's first year.

TABLE VI.—*Per cent distribution of deaths among infants born in Waterbury during selected year and infant deaths in the registration area in 1914, by age at death.*

Age at death.	Waterbury.	Registration area. ^a
All ages.....	100.0	100.0
Under 1 month.....	40.7	45.5
Less than 1 day.....	14.4	14.6
1 day but less than 2.....	4.2	5.1
2 days but less than 3.....	3.8	3.7
3 days but less than 7.....	6.5	7.3
1 week but less than 2.....	4.6	6.5
2 weeks but less than 1 month.....	7.2	8.4
1 month but less than 2.....	10.6	9.2
2 months but less than 3.....	6.8	7.6
3 months but less than 6.....	19.5	16.7
6 months but less than 9.....	12.5	11.9
9 months but less than 12.....	9.9	9.2

^a Derived from U. S. Bureau of the Census Mortality Statistics, 1914, p. 660.

The proportion of deaths during the early months of life is greater for infants of native mothers than for those of foreign-born mothers as shown in the following summary:

Age at death.	Per cent distribution of all infant deaths.	
	Native mothers.	Foreign-born mothers.
Less than 1 month.....	44.9	39.2
1 month but less than 2.....	13.1	9.8
2 months but less than 3.....	8.7	6.2

This result is to be expected, as 55.6 per cent of the deaths occurring during the first two months of life are due to the group of diseases "causes peculiar to early infancy," the most important group of causes of death for infants of native mothers.

MONTH OF BIRTH.

The relation of the month of birth to the age at death and the per cent of infant deaths by month of birth are presented in Tables VII and VIII. The mortality rate was lowest for infants born in October (95) and highest for those born in April (158.8). A study of the

distribution of infant deaths as shown in Table VIII seems to indicate that deaths under 1 month are most frequent among infants born during the winter months, and in the second to the fifth months of life the greater number of deaths occur among babies born in the late spring and in the summer.

TABLE VII.—*Live births during selected year and number and per cent of infant deaths, by month of birth.*

Month of birth.	Live births.	Infant deaths.	
		Number.	Per cent.
The year.....	2,144	263	12.3
June, 1913.....	168	20	11.9
July, 1913.....	151	20	13.2
August, 1913.....	198	28	14.1
September, 1913.....	160	20	12.5
October, 1913.....	179	17	9.5
November, 1913.....	190	21	11.1
December, 1913.....	184	24	13.0
January, 1914.....	188	21	11.2
February, 1914.....	174	19	10.9
March, 1914.....	198	22	11.1
April, 1914.....	170	27	15.9
May, 1914.....	184	24	13.0

TABLE VIII.—*Live births during selected year and infant deaths occurring in specified month of life, by month of birth.*

Month of birth.	Live births.	Infant deaths.	Deaths in specified month of life.											
			First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth.
The year.....	2,144	263	107	28	18	16	16	19	4	13	13	13	4	9
June, 1913.....	168	20	9	4	2	1	.....	1	.....	.....	1	1	1	.....
July, 1913.....	151	20	7	4	5	.....	.....	1	.....	1	1	1	.....	.....
August, 1913.....	198	28	11	5	1	1	2	2	.....	2	2	1	.....	1
September, 1913.....	160	20	9	1	1	2	1	1	2	.....	.....	2	1	.....
October, 1913.....	179	17	6	2	.....	.....	1	3	.....	.....	2	.....	.....	3
November, 1913.....	190	21	5	3	2	1	1	1	.....	3	1	4	.....	.....
December, 1913.....	184	24	11	2	.....	1	1	3	2	.....	2	2	.....	.....
January, 1914.....	188	21	12	2	.....	.....	.....	1	2	2	2	.....	.....	.....
February, 1914.....	174	19	10	.....	2	.....	2	1	.....	3	.....	.....	.....	1
March, 1914.....	198	22	11	2	.....	2	1	4	.....	.....	.....	.....	1	1
April, 1914.....	170	27	8	2	.....	4	5	1	1	.....	2	1	1	2
May, 1914.....	184	24	8	1	5	4	2	.....	.....	2	.....	1	.....	1

AGE OF MOTHER AND ORDER OF BIRTH.

The infant mortality rate, according to age of mother and order of issue based on all births reported in the maternal histories, is shown in Tables IX, X, and XI. The death rates for babies of extremely young mothers and for mothers aged 40 and over are very high, being 177.6 for the former and 160.3 for the latter. There is a material decrease in the rate for infants of mothers between the ages of 20 to 24 and 25 to 29; the rate rises again for babies born to mothers of the later age groups.

TABLE IX.^a—*Live births resulting from all pregnancies, infant deaths, and infant mortality rate, according to age of mother.*

Age of mother.	Live births.	Infant deaths.	Infant mortality rate. ^b
All ages.....	7,507	987	131.5
Under 20 years.....	518	92	177.6
20 to 24 years.....	2,368	300	126.7
25 to 29 years.....	2,451	297	121.2
30 to 34 years.....	1,418	184	129.8
35 to 39 years.....	613	87	141.9
40 years and over.....	131	21	160.3
Not reported.....	8	6	.....

^a General Table 9. ^b Not shown where base is less than 100.

Consideration of the births to the same mothers during the selected year only ¹ brings out the fact that the rates for all age groups show a similar trend except those for mothers under 20, for which the figures are too small for use in computing a rate. For the births to mothers in the single year of investigation there is a somewhat greater decline in the rate among mothers between 20 and 24, while the death rate of 192.3 for children of mothers 40 and over is even higher than that for mothers of the same age in the group showing all pregnancies.

TABLE X.—*Total births resulting from all pregnancies and per cent of births of specified numbers in order of birth, according to age of mother at birth of infant.*

Age of mother.	Total births.	Per cent of births of specified order.		
		Sixth and later.	Ninth and later.	Eleventh and later.
20 to 24 years.....	2,458	0.8	.....	.....
25 to 29 years.....	2,526	10.0	0.6	(^a) 0.8
30 to 34 years.....	1,466	37.8	6.7	9.0
35 to 39 years.....	641	64.0	27.0	32.3
40 years and over.....	138	83.5	54.9	

^a Less than one-tenth of 1 per cent.

The variation in the infant mortality rate according to order of pregnancy is brought out in Table XI. The rate for first-born children is 121.9; for second-born, 112.5; and it increases, with slight irregularities, for later-born children with the number of pregnancy to 197.2 for ninth-born children, the latest for which the figures are large enough to compute a significant rate. It is difficult to estimate how much the higher death rate for infants born to women of 40 and over is due to uterine exhaustion from bearing many children and how much it is due solely to age development. Of all children born to women of this age group, 32.3 per

¹ General Table 10.

cent are issues of an eleventh or later pregnancy, 54.9 per cent of a ninth or later pregnancy, and 83.5 per cent of a sixth or later pregnancy. For younger age groups the per cent of children who are issues of a sixth or later pregnancy is smaller and decreases rapidly as the age decreases, being 64 per cent for mothers between 35 and 39 years of age, 37.8 per cent for mothers between 30 and 34, and only 10 per cent for mothers between 25 and 29.

The infant mortality rate for infants of mothers under 20 is very high (177.6) in spite of the fact that nearly 95.4 of the infants considered are first and second born, for which the rate averages 117.8 (mothers of all ages). Not quite one-seventh of all first and second births were to these extremely young mothers. It is evident, therefore, that the age of the mother or some factor connoted by age here exercises an unfavorable influence on infant mortality independent of order of birth. The influence of age alone may be shown by a study of infant mortality rates for first births alone. The rate decreases from 167.5 for infants of mothers under 20, and 117 for ages 20 to 24, to a minimum of 83 for ages 25 to 29, and rises to 161.3 for infants of mothers 30 years old and over.

TABLE XI.^a—*Live births resulting from all pregnancies, infant deaths, and infant mortality rates, according to order of pregnancy.*

Order of pregnancy.	Live births.	Infant deaths.	Infant mortality rate. ^b
All pregnancies.....	7,507	987	131.5
Pregnancies:			
First.....	1,994	243	121.9
Second.....	1,547	174	112.5
Third.....	1,171	151	128.9
Fourth.....	870	109	125.3
Fifth.....	625	98	156.8
Sixth.....	426	72	169.0
Seventh.....	316	46	145.6
Eighth.....	211	33	156.4
Ninth.....	142	28	197.2
Tenth.....	93	14	.....
Eleventh and later.....	112	19	169.6

^a General Table 9.

^b Not shown where base is less than 100.

PLURAL BIRTHS.

Of the total pregnancies resulting in plural births 81 were live-born twins, 5 stillborn twins, 8 twin miscarriages, 4 one live-born and one stillborn twin, and one a miscarriage and a live-born baby.

The total number of issues for all pregnancies was 8,339,¹ making the rate for plural births 11.9 per 1,000 issues. This is higher than the corresponding rate for Manchester, which was 10.8.

Seventy deaths occurred among infants who were the result of plural births, giving the exceedingly high death rate of 419.2; in Manchester the rate was 500.

¹ This includes 567 miscarriages not included elsewhere in this report.

TABLE XII.—*Plural births resulting from all pregnancies, infant deaths, and stillbirths, according to age of mother.*

Age of mother.	Total births.	Live births.	Infant deaths.	Stillbirths.
All mothers.....	a 181	167	70	14
Under 20 years.....	12	12	6	.....
20 to 24 years.....	43	39	15	4
25 to 29 years.....	54	50	20	4
30 to 34 years.....	52	46	22	6
35 to 39 years.....	16	16	5	.....
40 years and over.....	4	4	2	.....

a The result of 99 pregnancies, of which 81 resulted in live-born twins, 5 resulted in stillborn twins, 8 resulted in miscarriage twins, 4 resulted in stillborn and live-born twins (4 each), 1 resulted in a miscarriage and a live birth; 5 mothers had 2 sets of twins.

SEX.

In conformity with general experience, the infant mortality rate among the male infants was higher than among the female as shown in Table XIII.

TABLE XIII.—*Births during selected year, infant deaths, and infant mortality rate, according to sex of infant and nativity of mother.*

Sex of infant and nativity of mother.	Total births.	Live births.	Infant deaths.	Infant mortality rate.
All mothers.....	2,197	2,144	263	122.7
Male.....	1,115	1,089	150	137.7
Female.....	1,082	1,055	113	107.1
Native mothers.....	718	705	69	97.9
Male.....	873	365	41	112.3
Female.....	845	340	28	82.4
Foreign-born mothers.....	1,479	1,439	194	134.8
Male.....	742	724	109	150.6
Female.....	737	715	85	118.9

The rate for female infants of native mothers was but 82.4, while the rate for their male infants was 112.3. But even this comparatively high rate for the male infants was lower than the rate of 118.9 for the female infants of foreign-born mothers; the rate for male infants of this group was 150.6.

The proportion of male births to total births is slightly greater for native mothers than for foreign-born mothers; consequently the average for the native mothers is slightly weighted by the excess proportion of male births with higher mortality, while the average for foreign-born mothers is slightly lessened by the relatively low proportion of male births; the true difference between the mortality rates for infants of native and foreign-born mothers is slightly greater than that shown by the difference between the averages for both sexes and is shown by the differences between the rates for each sex separately.

STILLBIRTHS.

It is now recognized that much of the tremendous loss of life before and at birth can be prevented. An analysis of the fetal loss of life in a community has, therefore, a logical place in every study of infant mortality.

Such an analysis, however, can not be made for Waterbury because the State law of Connecticut makes no definite requirements relative to the registration of miscarriages or stillbirths, the general term "births" being used, but not defined in the law.

The total number of stillbirths and miscarriages known to have occurred in Waterbury during the period under discussion was 86,¹ but complete histories were secured for only 53 stillbirths. Even though we accept the former figure, it is obviously much too low, as registration of stillbirths is much more difficult to secure than that of live births, and even a house-to-house canvass may not secure a complete record of stillbirths. Therefore, as the city failed to register over 12 per cent of its live births, and as its laws do not emphasize the necessity for registering stillbirths, a large percentage of the latter probably were not recorded.

Although the figures for stillbirths are admittedly too small and incomplete to permit of detailed analysis, nevertheless they may be taken as an indication of conditions. The distribution of these 53 stillbirths by nationality of mother is shown in Table XIV.

TABLE XIV.^a—*Births during selected year and number and per cent of stillbirths, according to nationality of mother.*

Nationality of mother.	Total births.	Stillbirths.	
		Number.	Per cent.
All mothers.....	2,197	53	2.4
Native mothers.....	718	13	1.8
Foreign-born mothers.....	1,479	40	2.7
Italian.....	651	23	3.5
Lithuanian.....	267	7	2.6
Irish.....	200	5	2.5
All other.....	361	5	1.4

^a General Table 2.

An analysis of the small group for which records were secured shows that the per cent of stillbirths was lowest for native mothers and highest for Italian mothers. In case of births to native mothers, a low proportion of stillbirths was associated with a low infant mortality rate; but for births to Italian mothers a comparatively low mortality rate is accompanied by a high proportion of stillbirths. As stillbirths result largely from the same prenatal conditions which

¹ General Table 1.

cause a large number of the infant deaths in the first few weeks of life, it naturally follows that for any group a low infant mortality rate should not be considered a satisfactory goal unless accompanied by a low stillbirth rate.

That the stillbirth figures for the selected period are much too small is clearly indicated in Table XV, which gives the stillbirth rate for all pregnancies of the same mothers. The rate is higher for every nationality except the Irish, for whom it is six-tenths of 1 per cent lower than that based on the smaller figures.

TABLE XV.—*Total births resulting from all pregnancies and number and per cent of stillbirths, according to nationality of mother.*

Nationality of mother.	Total births.	Stillbirths.	
		Number.	Per cent.
All mothers.....	7,772	265	3.4
Native mothers.....	2,027	53	2.6
Foreign-born mothers.....	5,745	212	3.7
Italian.....	2,689	139	5.2
Lithuanian.....	961	26	2.7
Irish.....	823	16	1.9
All other.....	1,272	31	2.4

But here, as in the figures for the selected year, the Italians show the highest stillbirth rate, a rate almost twice that of the Lithuanians.

The importance of order of birth, employment of mother, family income, and other factors discussed in connection with infant mortality can not be gauged by the 53 stillbirths for which such data were secured, and a study of stillbirths alone eliminates from consideration a large number of prenatal deaths which are equally significant. Combining all stillbirths and miscarriages reported by the 2,155 mothers visited gives a total of 832 prenatal losses, as shown in Table XVI. The total number of issues to these mothers was 8,339, giving a prenatal mortality rate of 99.8.

At present little attention is paid by some physicians, or even by many mothers themselves, to the losses which occur during the early months of fetal existence. One mother who was interviewed was much amused by the attempt to include all miscarriages in her maternal history, because, as she expressed it "they didn't amount to anything under three months." Although it may never be practicable to insist that *every* pregnancy be recorded, it must be realized that until registration of all *recognized* pregnancies is made compulsory a vast opportunity for the study of measures for preventing prenatal deaths and deaths which occur in early infancy is lost.

TABLE XVI.—Stillbirths and miscarriages, and mothers reporting specified number of issues of specified kind.

Kind of issue.	Total issues.	All mothers.	Number of issues of specified kind.							
			1	2	3	4	5	6	8	9
Stillbirths ^a	265	184	137	31	10	3	.....	1	.....	2
Miscarriages ^b	567	363	235	77	34	12	4	.....	1	.....

^a General Table 11.

^b General Table 12.

Medical causes of stillbirths must be diagnosed in hospitals, where the proper equipment for diagnosis is available. Certain of these causes are extremely important, as emphasized by Dr. J. Whitridge Williams in a study of the limitations and possibilities of prenatal care. He says:

* * * it has long been known that this disease (syphilis) plays an important part in the causation of fetal deaths and should always be borne in mind when successive pregnancies end in the birth of dead children * * *.¹

The importance of these medical causes of stillbirths has not been overlooked, but they can not be studied in this type of investigation, which aims to discover the social causes which must be considered in connection with the immediate medical cause if a real solution of the problem is to be found.

MATERNITY CARE.

Employment of mother during pregnancy.—Important as medical supervision during pregnancy is, the need for sufficient household help and early cessation from steady employment should be emphasized in the program of adequate prenatal and confinement care.

Housework.—Of the 2,197 births studied, 1,740² or 79.2 per cent were to mothers accustomed to doing their household work, including cooking, cleaning, and washing and ironing without any paid assistance; 371 or 16.9 per cent were to mothers having some help, usually a woman to clean once a week or to do the washing; only 71 or 3.2 per cent were to mothers keeping a servant.

Of the 716³ births to mothers who were gainfully employed during the year before the infant's birth, 558 or 77.9 per cent were to mothers who worked in the home, 519 to those keeping lodgers, and 39 to mothers engaged in some other form of home work. Five hundred and ten births were to mothers who worked up to within two weeks of confinement, most of them continuing up to the day and often to the hour of confinement.

¹ Williams, J. Whitridge. American Association for Study and Prevention of Infant Mortality, 1914, p. 35.
² General Table 13.
³ General Table 14.

Factory work.—Connecticut is one of the four States possessing a law prohibiting factory work for women during the last months of pregnancy.¹

Of the 95 women who worked in the metal factories, 66 ceased work at least three months before confinement, 15 more stopped before the last month of pregnancy, and only 2 worked up to within two weeks of the baby's birth.

Attendant at birth.—A large foreign population would naturally presuppose the general employment of midwives for confinement services. It is therefore surprising to find that almost half of the foreign-born and more than nine-tenths of the native mothers were attended at the time of confinement by physicians only.

TABLE XVII.—*Number and per cent distribution of births during selected year to mothers of specified nativity, according to kind of attendant at birth.*

Kind of attendant at birth.	Total mothers.		Native mothers.		Foreign-born mothers.	
	Number of births.	Per cent distribution.	Number of births.	Per cent distribution.	Number of births.	Per cent distribution.
All classes.....	2,197	100.0	718	100.0	1,479	100.0
Physician and midwife.....	54	2.5	1	.1	53	3.6
Physician.....	1,405	63.9	686	95.5	719	48.6
Midwife.....	669	30.5	27	3.8	642	43.4
Other.....	57	2.6	4	.6	53	3.6
None.....	11	.4	.....	.....	11	.7
Not reported.....	1	(a)	.....	.....	1	(a)

a Less than one-tenth of 1 per cent.

In addition one-tenth of 1 per cent of the native and 3.6 per cent of the foreign-born mothers were attended by both a physician and a midwife. These were usually cases attended by midwives in which some complication developed at the time of labor, making it necessary for the midwife to call in a physician to take charge of the case.

Of the 2,197 births included in the detailed analysis which occurred in Waterbury during the selected period, 209² cases were attended by physicians in hospitals, 1,250 by private physicians, 669 by midwives, and 69 had either some attendant other than those specified or no attendant, or there was no report upon the case. Of the 669 cases attended by midwives over one-third had no attendants other than midwives whose names do not appear in the State's published directory of licensed practitioners. One unlicensed midwife attended about 90 confinements during the 12 months under consideration, her work being supervised by her daughter (a registered midwife) and by

¹ It shall be unlawful for the owner, proprietor, manager, foreman, or other person in authority, of any factory, mercantile establishment, mill, or workshop knowingly to employ a woman or permit a woman to be employed therein within four weeks previous to confinement or four weeks after she has given birth to a child. Any person who shall violate any provision of this act shall be fined not more than \$25, or imprisoned not more than 30 days, or both.—Acts of 1913, ch. 112, secs. 1 and 2.

² General Table 16.

a physician. Over one-fifth of the cases attended by midwives, however, received no supervision of any kind.

Midwives attended 3.8 per cent of the births to native mothers, the majority of whom were native born of foreign parents who at the time of confinement were probably influenced by the Old World customs of their mothers. Six hundred and forty-two or 43.4 per cent of the births to foreign-born women were also attended by midwives. This included 447 or 68.7 per cent of the births to Italian mothers, 144 or 53.9 per cent of those to the Lithuanians, and 2 or 1 per cent of the births to Irish mothers.

TABLE XVIII^a.—Births during selected year to mothers of specified nationality, according to kind of attendant at birth.

Kind of attendant at birth.	Total births.	Births to native mothers.	Births to foreign-born mothers.				
			Total.	Italian.	Lithuanian.	Irish.	All other.
All classes.....	2, 197	718	1, 479	651	267	200	361
Physician.....	1, 459	687	772	171	107	192	302
Midwife.....	669	27	642	447	144	2	49
Other, none, or not reported.....	69	4	65	33	16	6	10

^a General Table 15.

The large number of confinements attended by midwives, usually without any supervision or control, made it seem advisable to obtain some data regarding the nature of the care given by midwives in Waterbury. This information was secured by a supplementary schedule. Many of the mothers refused the information, fearing it would lead to prosecution of the midwife, who, in many cases, was practicing without a license. A little less than one-third gave the required information. These cases were representative, however, of the groups employing midwives, the larger number being Italian and Lithuanian. In the majority of cases the mother and midwife were of the same nationality, although one of the best midwives employed by the Italian mothers was unable to speak or understand Italian and all conversation had to be conducted in the sign language. The Italians in particular associate a strong sense of shame with permitting a man to attend a woman in confinement. Many of the Italian mothers interviewed spoke of this, adding that in Italy no woman would have a man physician, except in cases in which complications developed. The Lithuanian women generally made no comment except to the effect that midwives were as a rule just as good as doctors, did more, and charged less. The extensive service at less cost than the limited services of a physician also impressed the Italian mothers, one of whom exclaimed: "Doctor no good; come one time, good-a-bye; that all. Midwife come eight days, wash bambino, wash mamma. Don't gotta have

nurse. All right." The usual fee for the midwives for eight daily visits following confinement was \$8, while the physician's fee for similar service ranged from \$15 to \$25. But the midwives performed a multitude of services not rendered by the physician and extended their care over weeks, if necessary, without any extra charge, in some cases even making a reduction if the family was unable to pay the usual amount. Frequently the midwife remained in the home, taking the mother's place until she was able to resume her duties. The performance of such intimate offices naturally serve to strengthen the midwife's hold on the family, as they realize that no such services could be expected from the physician. The quality of the confinement care received little consideration, childbirth being regarded more an incident than an event by the majority of mothers interviewed. They frequently waited until the first stage of labor had begun before sending for the attendant. Some member of the family or a neighbor thereupon rushed for the nearest midwife, and, if she happened to be out, anyone suggested by the first person encountered was engaged. In many cases the mother knew only the Christian name of her attendant and one mother who was typical of many said: "I forget her name, I forget her house, I forget all but what she charge."

One reason for the confidence foreign-born women repose in midwives is probably due to their assumption that a midwife in the United States is entitled to the same standing she would enjoy in Europe. There, midwives are usually graduates of schools of midwifery and in most countries the Government supervises all midwives who are licensed to practice.

The Connecticut law provides that a midwife practicing in that State shall pass an examination given by the State board of examiners of midwives and receive from it a license to practice. As insufficient steps are taken to enforce the law, it is widely disregarded. It was evidently framed to apply primarily to medical practitioners and the clauses pertaining to midwives were inserted without appropriate changes being made throughout the law. No person may practice medicine, surgery, or midwifery without obtaining a certificate of registration from the State board of health.¹

¹ *Requirements for obtaining certificate of registration.*—No person shall obtain a certificate of registration as in section 4714 required until he has passed a satisfactory examination before one of the examining committees appointed for the purpose by the State board of health, nor until he has filed with said board duplicate certificates signed by a majority of said examining committee, stating that they have found him qualified to practice either medicine, surgery, or midwifery, nor until he has filed with said board duplicate statements subscribed and sworn to by him upon blanks furnished by said board, giving his name, age, place of birth, and present residence, stating of what medical college he is a graduate, and the date of such graduation, together with such other information as shall be required by said blanks. No person shall be eligible to said examination until he presents to the committee, by whom he is to be examined, satisfactory evidence that he has received a diploma from some legally incorporated medical college. Any person passing such examination and filing said certificates and statements shall receive from said State board of health, upon payment of two dollars, a certificate of registration, which shall state that the person named has been found qualified so to practice.—A Manual of Statutes of Connecticut relating to the Public Health and Safety, 1902, sec. 4715.

If an applicant for the practice of midwifery is accepted for examination she pays \$10 instead of the \$15 exacted for those desiring to practice medicine or surgery. She is not required to have a knowledge of English, but an opportunity for deception is offered by that section of the law providing that if an applicant does not understand or speak English the examination can be conducted through an interpreter of the language which the applicant understands. Penalties are provided for violation of the act.

Many mothers interviewed knew that the midwives they employed were not licensed, but they were unable to understand the reason, especially in cases where their services had been more satisfactory than those of the licensed midwives.

Only one midwife was found who gave any prenatal care which could compare with that given by a clinic or a well-trained obstetrical nurse. She made frequent urinalyses and always referred the case to a physician whenever traces of albumen made their appearance. She instructed the mothers in regard to the proper diet, care of the breasts, exercise, necessary preparation for confinement, and the outfit for the baby. During the confinement period she took the mother's temperature daily; the general testimony was to the effect that she was very clean, using disinfectants and exercising great care in all that she did. Her charges varied from \$5 to \$18, according to the financial standing of her patients, but so far as could be learned the same skilled attention was given to all.

At the other extreme were found several midwives who were ignorant and careless, and the incidents related by many of the mothers showed complete ignorance on the part of the midwife of the dangers of infection. One mother reported that as a result of improper care at confinement she became bloated and suffered great pain. She notified the midwife, who gave her no attention except to send an old woman to examine her. The patient continued to grow worse and finally called in a physician, who said he would do nothing for her without examining her. As she would not permit that, he was obliged to retire from the case. When visited over two years after the confinement the woman was still an invalid.

Extremes in confinement care were also found in cases attended by physicians, due, no doubt, to the popular belief, prevalent in all sections of our country, that confinement cases do not require the services of specialists.

Dr. J. Whitridge Williams,¹ in summing up needed reforms in obstetrical education, emphasized the need of "education of the laity that poorly trained doctors are dangerous, that most of the ills of women result from poor obstetrics, and that poor women in fairly

¹ Williams, J. Whitridge. American Association for Study and Prevention of Infant Mortality, 1911, p. 194.

well conducted free hospitals usually receive better care than the well-to-do women in their own homes."

He also urges the extension of free obstetrical services such as hospitals and out-patient service for the poor and proper semifree hospital accommodation for those in moderate circumstances, with qualified obstetrical attendant nurses. All of these reforms in obstetrical knowledge and equipment need development in Waterbury if each year over 2,000 of its mothers are to receive proper care during pregnancy and at the time of confinement.

Nursing care during confinement period.—The care of the mother during the two weeks following the birth of the baby is extremely important, as the future health of the mother frequently depends upon her care during this period. Native mothers in general received much better nursing care than the foreign born, slightly more than 20 per cent having hospital care and, in addition to these, over 15 per cent were attended by trained nurses; of the foreign-born mothers only 4 per cent had hospital care and 5 per cent were attended in the home by trained nurses. The mothers of 377 babies or 52.5 per cent of the native group and of 930 or 62.9 per cent of the foreign-born group confined at home had some household help other than the family during the confinement period; but 76 or 10.6 per cent of the former and 407 or 27.5 per cent of the latter were obliged to rely solely upon neighbors or members of the family. It is this group which is so apt to prefer the midwife to the physician, since the former renders the services of the physician, nurse, and servant at far lower cost.

Many of these families were unable to pay for services of any kind, and frequently there was no one except neighbors to do the housework unless it was left for the father of the baby when he returned from work.

Under such conditions mothers with other small children could not remain in bed as long as they should. One Italian mother found it impossible to remain in bed more than four or five days when her last baby, the ninth child, was born, because in addition to caring for the seven children at home, all under 14 years of age, it was necessary for her to do the cooking and laundry work for several lodgers. Since the father of the family earned less than \$500 a year it was impossible to hire household assistance, and the only help given the mother was by neighbors and the baby's father.

So long as those families in the lowest wage group do not receive sufficient income to insure at least the necessities of life, plans for adequate free prenatal and confinement care should include sufficient household help to permit the mother to remain in bed as long as advised by her physician.

MATERNAL MORTALITY.

The importance of maternal care, especially during the first few months of life, is in itself sufficient reason for including a study of maternal mortality in a report on the prevention of infant mortality.

The death of the mother at any time during the infancy of the child is prejudicial to its welfare, as the death of the mother removes the child's natural caretaker and another must be substituted. Each change in caretaker is accompanied by changes in standards and methods which can not be otherwise than disturbing to the health of the infant.

Eighteen of the mothers considered in this report died during the 12 months following childbirth.¹ Two of the births to these 18 mothers were stillbirths. Among the 16 live-born babies, instead of the two deaths that would normally have occurred at the average rate for the city (122.7), there were actually six deaths before the end of the first year of life, a rate three times the normal.

In the majority of the cases where the mother died during the early infancy of the child the responsibility for the infant's care was naturally transferred to the father. Unable to care for the child himself, he was forced to hire an outsider to come into the home or to place the child in an institution, unless older children or relatives came to his assistance. An excellent example of the dilemma faced by a father responsible for the care of a motherless infant is found in a family in which the mother died when the baby was 2 months old and the other three little girls were all under 8 years of age. The father, not knowing how to care for the baby, took her to the hospital, not because she was ill but because he did not know what else to do with her. Two weeks later he removed her from the hospital to the home of his sister, who was able to care for her but two weeks, when the baby was returned to the hospital where she remained for almost a month. The father then took the baby to his home in charge of a housekeeper; but, not liking the care given her, took her to a friend, who kept her five days, when she died of "bronchitis and exhaustion." This child was perfectly well and strong at the time of the mother's death, but died less than two months later in spite of the father's earnest effort to provide the best possible care.

¹ The following enumeration gives the death-certificate causes of death and the period elapsing between the day of confinement and the day of death: (1) Puerperal sepsis and cerebral embolism, 7 days; (2) acute nephritis and acute uremic poisoning, less than 1 day; (3) puerperal infection, 7 days; (4) puerperal sepsis, 14 days; (5) puerperal nephritis and general septicemia, 9 days; (6) kidney of pregnancy and uremic convulsions, 1 day; (7) acute parenchymatous nephritis and uremia supervening, 7 days; (8) hemorrhage and pregnancy, less than 1 day; (9) nephritis, pulmonary edema, and exhaustion, 1 day; (10) post partum hemorrhage, acute nephritis, and pregnancy, 9 days; (11) pneumonia and grippe, 8 months; (12) chronic endocarditis and pregnancy, labor, and acute dilatation of heart, less than 1 day; (13) pulmonary tuberculosis and exhaustion, 3 months and 1 day; (14) pulmonary tuberculosis and exhaustion, 15 weeks; (15) lobar pneumonia, 9 days; (16) erysipelas (facial) and interstitial nephritis, 5 months; (17) mitral regurgitation and nephritis, 10 months and 18 days; (18) pulmonary tuberculosis and exhaustion, 7 months.

In the 12 instances of maternal mortality following closely on childbirth the problem of the infant's care was solved as follows: In 4 cases relatives took the baby, 1 was adopted, 1 was boarded in a private family, 1 was placed in an institution, and 5 spent the greater part of their first year of life in hospitals.

Maternal mortality from conditions connected with pregnancy and childbirth.—That the subject of maternal mortality from conditions connected with pregnancy and childbirth has received so little attention heretofore is due to the fact that the relatively small number of deaths of mothers from childbirth has been lost sight of in the large number of normal deliveries. Consideration of the actual figures gives the matter more importance. It is estimated that in the year 1913 there were in the United States 15,376 deaths¹ due to childbirth, and of these 6,977 were due to complications of childbirth fever, or puerperal sepsis, a disease which is largely preventable. The best practical method for comparative purposes is to compute the maternal mortality rate on the number of maternal deaths per thousand live births. This rate² for the provisional birth-registration area for the year 1910 was 6.5 for all deaths from all diseases connected with pregnancy and confinement, of which 2.9 was from puerperal septicemia and 3.6 for deaths from all other diseases of pregnancy and confinement. For every 154 babies born alive one mother lost her life.

In Waterbury, during the period considered in this study, 10 mothers died from causes resulting directly from confinement; 4 of these deaths were caused by puerperal septicemia. The number of maternal deaths per 1,000 live births from all diseases of pregnancy and confinement was 4.7; from puerperal septicemia, 1.9; and from all other diseases of pregnancy and confinement, 2.8. One mother lost her life for every 214 babies born alive in Waterbury. In addition to the mothers included above, one died the day following confinement and one died in less than two weeks.

Comparative figures for maternal mortality for Connecticut, Waterbury, and the provisional birth-registration area for 1910 are given in Table XIX. Waterbury had a rate of 5.1 for deaths from diseases of pregnancy and confinement, or 0.3 less than the rate for the State and 1.4 less than that for the birth-registration area; and for deaths from puerperal septicemia it had a rate less than that for the other cities shown and 0.5 less than the rate for the State.

¹ U. S. Children's Bureau publication No. 19, Maternal Mortality, p. 14.

² Table XIX, p. 51.

TABLE XIX.—Population estimated as of July 1, 1910, live births, deaths, and death rates per 100,000 population and per 1,000 live births from diseases of pregnancy and confinement for the provisional birth-registration area, the State of Connecticut, and specified cities, 1910.^a

State and city.	Population July 1, 1910 (estimated).	Live births 1910.	Deaths from diseases of pregnancy and confinement.								
			Total.			Puerperal septi-cemia.			All other.		
			Num-ber.	Rate per 100,000 popu-lation.	Rate per 1,000 live births	Num-ber.	Rate per 100,000 popu-lation.	Rate per 1,000 live births	Num-ber.	Rate per 100,000 popu-lation.	Rate per 1,000 live births
Provisional birth-registration area ...	22,222,404	562,390	3,652	16.4	6.5	1,612	7.3	2.9	2,040	9.2	3.6
Connecticut.....	1,119,109	27,291	148	13.2	5.4	65	5.8	2.4	83	7.4	3.0
Bridgeport.....	102,709	2,976	15	14.6	5.0	6	5.8	2.0	9	8.9	3.0
New Haven.....	134,145	3,772	19	14.2	5.0	10	7.5	2.7	9	6.7	2.4
Waterbury ^b	73,605	2,150	11	14.9	5.1	4	5.4	1.9	7	9.5	3.3

^a U. S. Children's Bureau publication No. 19, Maternal Mortality, p. 52. The birth-registration area is as established by United States Bureau of the Census. See Mortality Statistics, 1911.
^b Connecticut Vital Statistics, 1910, pp. 12, 55.

FEEDING.

Improper feeding of infants, especially during the first nine months of life, is one of the most important causes of infant mortality.

The mother who through ignorance, carelessness, or necessity too soon substitutes artificial food for breast milk opens the way for diseases, especially those of the intestinal tract, as was discussed in the section of this report on gastric and intestinal diseases.

Of the 2,197 births included in this report, 2,144 were live born, but of this number 63 did not survive long enough to be fed and for 2 the information secured was incomplete; hence the tables relating to feeding are based upon the remaining 2,079.¹

Methods of feeding are divided into (a) breast feeding; (b) artificial feeding, i. e., any feeding from which breast milk has been excluded; and (c) mixed feeding, a combination of breast with some other form of feeding.

Owing to the fact that most babies receive more than one kind of feeding during the first nine months, it is necessary in considering either group to classify according to the type of feeding given during the greater part of a specified month.

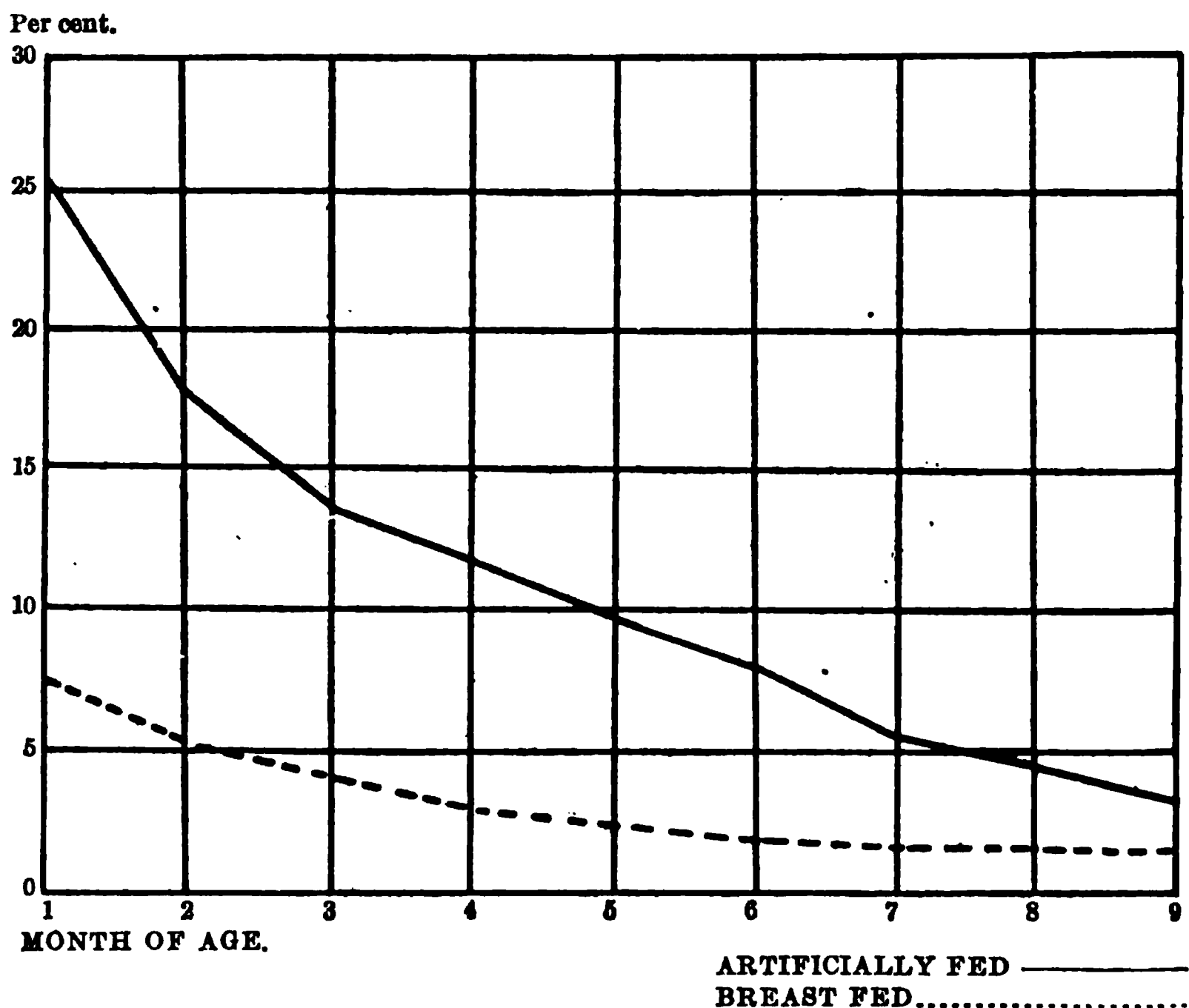
Of the 2,079 infants who lived long enough to be fed, 226 or 10.9 per cent were artificially fed during the first month of life, thereby being robbed of the protection afforded by maternal nursing. It is significant that 58, or more than one-fourth of these infants who were artificially fed from birth, died before the end of their first year, the mortality rate for this group being 256.6, more than twice that for Waterbury as a whole.

¹ General Table 19.

Many of these deaths doubtless resulted from conditions which existed before the birth of the child, and exclusive breast feeding might have been powerless to prevent them. But to rob the already handicapped child of his mother's milk is to remove his most powerful aid in the fight for life, and every effort should be made to secure maternal nursing at least during the early days of life.

This is strikingly portrayed in Chart VII, which shows the per cent of both artificially and breast fed babies alive at the beginning

CHART VII.—PER CENT DYING SUBSEQUENTLY IN FIRST YEAR OF LIFE OF INFANTS SURVIVING AT BEGINNING OF SPECIFIED MONTH OF AGE, BY TYPE OF FEEDING.



of specified months who died before the end of the year. It brings out the fact that a baby breast fed the first month has a slightly greater chance of living until the end of the year than the baby who has survived to the sixth month of life and is artificially fed at that time.

Breast versus artificial feeding.—A comparison of the percentage of deaths through the year for breast-fed and artificially-fed infants according to the type of feeding for any single month will reveal the great advantage the breast-fed baby has over the one who is artifi-

cially fed. Feeding for only nine months of the child's first year has been considered, as after that period breast milk is not, in most cases, essential to his diet. As he approached the time when he could be safely weaned the difference between the death rates for the two groups became less marked. The artificially-fed child had from three to four times as great a mortality as the breast-fed baby at every age through the sixth month of life, as is clearly demonstrated in Table XX. But each succeeding month shows a marked decline in the difference until the ninth month, when the breast-fed group has an advantage of only 1.2 per cent.

Whereas the per cent of deaths for breast-fed babies was only slightly higher for babies of foreign-born mothers in the first six months of life, the differences in the per cent of deaths for artificially-fed infants was marked, being about twice as high for the foreign born during the first three months and over three times as great for the second three months. Such wide differences indicate that there is great need of education among the foreign-born mothers, especially in regard to proper methods of artificially feeding their infants.

TABLE XX.^a—*Number of infants dying before end of first year of life per 100 infants surviving at the beginning of specified month and fed in specified way, according to nativity of mother.*

Month of life and type of feeding.	Total mothers.	Native mothers.	Foreign-born mothers.
First month:			
Breast exclusively.....	7.4	5.7	8.3
Mixed.....	15.4	12.5	16.7
Artificial exclusively.....	25.7	16.3	32.1
Second month:			
Breast exclusively.....	5.4	3.6	6.2
Mixed.....	10.5	8.3	11.9
Artificial exclusively.....	18.4	12.1	23.3
Third month:			
Breast exclusively.....	4.2	3.1	4.7
Mixed.....	8.7	.....	12.4
Artificial exclusively.....	13.8	8.5	18.2
Fourth month:			
Breast exclusively.....	3.1	2.7	3.2
Mixed.....	6.4	.....	8.7
Artificial exclusively.....	12.3	5.8	17.4
Fifth month:			
Breast exclusively.....	2.5	1.9	2.8
Mixed.....	4.8	3.0	5.5
Artificial exclusively.....	10.1	4.1	14.6
Sixth month:			
Breast exclusively.....	2.2	1.3	2.6
Mixed.....	3.0	3.3	2.9
Artificial exclusively.....	8.1	3.3	11.8
Seventh month:			
Breast exclusively.....	2.1	.8	2.6
Mixed.....	1.7	2.3	1.5
Artificial exclusively.....	5.6	2.7	7.9
Eighth month:			
Breast exclusively.....	2.0	.9	2.5
Mixed.....	1.2	1.8	1.0
Artificial exclusively.....	4.8	2.2	6.7
Ninth month:			
Breast exclusively.....	2.1	1.2	2.5
Mixed.....	.7	.5	.8
Artificial exclusively.....	3.8	1.4	4.8

^a General Table 19.

Mixed feeding.—The above comparisons have not considered mixed feeding, which is not so desirable during the earliest months of the infant's life as exclusive breast feeding but is much better than artificial feeding. Even partial breast feeding somewhat safeguards the infant's digestion and to some extent insures him against early death. Any attempt to discuss the groups "mixed" and "artificially fed" must take into consideration the fact that they included infants receiving every grade of care, from the child whose parents were able to secure for it highly specialized supervision of a medical adviser to the baby who received the scant attention of the untrained and over-worked mother who must provide for a large family with an inadequate income.

Through the fifth month ¹ the deaths among the babies who had mixed feeding were relatively twice as numerous as among those wholly breast fed, although from one-third to one-half less than for those entirely artificially fed. In other words, where the artificially-fed baby had three chances of dying, the one on mixed feeding had but two, and the one breast fed had only one chance of dying before the end of the first year.

Artificial feeding.—It is commonly stated that native mothers are much more apt to discontinue nursing their children during the early months of life than are foreign-born mothers. Although a comparison of the native and foreign born only would support this theory, a division of the foreign born into component nationality groups shows that throughout the first nine months the per cent of artificial feeding is greater for the infants of Lithuanian mothers than for the infants of native mothers.

TABLE XXI.^a—*Per cent artificially fed of infants surviving at end of specified month of life, according to nationality of mother.*

Nationality of mother.	First month.	Third month.	Sixth month.	Ninth month.
Native mothers.....	13.2	26.0	36.6	44.1
Foreign-born mothers.....	9.0	15.8	22.9	29.4
Italian.....	4.5	8.6	15.3	20.8
Lithuanian.....	16.4	29.7	39.5	49.3
Irish.....	9.9	15.2	21.6	29.5
Other.....	10.9	19.1	26.1	31.4

^a General Table 20.

If for any month the nationalities be arranged in decreasing order according to the percentage of infants receiving no breast milk, the enumeration will be (1) Lithuanian, (2) native, (3) Irish, (4) Italian. A list of nationalities similarly arranged according to infant mortality rates for the selected period results in the following order: (1) Lithuanian, (2) Irish, (3) Italian, (4) native.² With the exception

¹ Table XX, p. 53.

² General Table 2.

of the native the relative positions for the specified groups is identical, indicating a direct relation between the infant mortality rate for a nationality and its group method of infant feeding.

Relation of income to feeding.—The predominance of the native in the highest income group suggests that adequate income may have played some part in insuring safety in artificial feeding. This fact seems to be indicated by the figures in Table XXII, which show that as the income from father's earnings increased the per cent of infant deaths decreased for each kind of feeding. But it also shows that the per cent of deaths for artificially-fed infants was much higher than for breast-fed infants in every income group.

Breast feeding is a safeguard to the infant of the poor mother, who may be able to provide good and sufficient breast milk when she would not be able to afford the proper ingredients for artificial food.

TABLE XXII.—*Infants born during selected year surviving at end of 3 and 6 months of life whose fathers earned specified amount, and number and per cent of subsequent infant deaths, according to type of feeding throughout specified period.*

Type of feeding and period of life.	Infant survivors. ^a	Subsequent infant deaths.		Earnings of father.								
				Under \$650.		\$650 to \$1,049.		\$1,050 and over.				
				Infant survivors.	Subsequent infant deaths.	Infant survivors.	Subsequent infant deaths.	Infant survivors.	Subsequent infant deaths.			
										Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
First 3 months.....	1,969	110	5.5	973	71	7.3	666	31	4.7	305	6	2.0
Breast exclusively....	1,467	55	3.7	746	37	5.0	476	14	2.9	217	2	.9
Mixed.....	36	1	2.8	16	1	6.3	10	.....	.....	10	.....	.....
Artificial exclusively..	190	26	13.7	78	14	17.9	66	9	13.6	38	3	7.9
More than 1 type.....	296	28	9.5	133	19	14.3	114	8	7.0	40	1	2.5
First 6 months.....	1,938	59	3.0	940	38	4.0	653	18	2.8	300	1	.3
Breast exclusively....	1,070	21	2.0	523	11	2.1	364	8	2.2	162	.....	.....
Mixed.....	27	1	3.7	12	1	8.3	7	.....	.....	8	.....	.....
Artificial exclusively..	177	13	7.3	71	7	9.9	63	6	9.5	35	.....	.....
More than 1 type.....	664	24	3.6	334	19	5.7	219	4	1.8	95	1	1.1

^a Including those for whom there were no earnings and those not reported.

Of the babies artificially fed at the end of the third month of life 28.1 per cent of the native were in the group whose fathers earned \$1,050 and over during the year following the birth of the baby as compared with 7.4 per cent of the Irish and 4 per cent of the Italians; there were no Lithuanians in this income group. (See Table XXIII, p. 56.) The corresponding figures for the babies living at the end of the sixth month show little variation, being 30.8 per cent of the native, 8.3 per cent of the Irish, 4.5 per cent of the Italians, and 1.2 per cent of the Lithuanians.

Of the Lithuanian infants artificially fed at the end of the third month 85.5 per cent had fathers who earned less than \$650 during the

year following the birth of the baby, 72 per cent of the Italians and 44.4 per cent of the Irish also falling in this income group.

The feeding methods of the various nationalities were not materially affected by increased incomes.¹ Very few of the Italians substituted artificial for breast feeding in any income group; a large proportion of the native and Lithuanians but not so many of the infants of Irish mothers were artificially fed regardless of the fathers' earnings.

TABLE XXIII.—*Number and per cent in each father's earnings group of infants surviving and artificially fed at end of specified period of life, according to nationality of mother.*

Specified period and nationality of mother.	Total artificially fed infants. ^a	Earnings of father.					
		Under \$650.		\$650 to \$1,049.		\$1,050 and over.	
		Num-ber.	Per cent.	Num-ber.	Per cent.	Num-ber.	Per cent.
3 months:							
Native.....	171	38	22.2	82	48.0	48	28.1
Italian.....	50	36	72.0	8	16.0	2	4.0
Lithuanian.....	69	59	85.5	8	11.6	.....	.....
Irish.....	27	12	44.4	11	40.7	2	7.4
6 months:							
Native.....	237	53	22.4	106	44.7	73	30.8
Italian.....	88	63	71.6	17	19.3	4	4.5
Lithuanian.....	86	70	81.4	13	15.1	1	1.2
Irish.....	36	17	47.2	14	38.9	3	8.3
9 months:							
Native.....	282	57	20.2	123	43.6	95	33.7
Italian.....	118	86	72.9	23	19.5	5	4.2
Lithuanian.....	104	85	81.7	12	11.5	2	1.9
Irish.....	48	20	41.7	20	41.7	6	12.5

^a Including those for whom there were no earnings and those not reported.

One of the serious handicaps imposed by poverty is the inability to procure the essentials for successful artificial or mixed feeding, viz, (1) pure milk, (2) equipment for preparing and keeping modified milk, (3) supervision by a physician with special training in methods of infant feeding, and (4) instruction in preparing and using the formulas prescribed by the physicians.

At the time this investigation was made the supply of safe milk available for the poorer sections of Waterbury was inadequate. Many of the mothers living on the hills on the outskirts of the city were unable to secure milk without going down into the city, as, during bad weather, the condition of the roads made it impossible for the dairies to deliver. In the congested districts it was the practice to purchase "bulk" milk from small shops where, during the summer months cans were kept in the heat, open to dust and flies, and the milk was ladled out to customers in a measure covered with dirt and stale if not sour milk.

¹ General Table 21.

Condensed milk.—Many of the mothers interviewed were unable to afford good cows' milk and had substituted condensed milk for all or part of the artificial feeding.

Of the 339 babies who received condensed milk, 101 or nearly one-third were so fed during the first month of life. In 6 cases this form of feeding was advised by physicians, but in general the condensed milk was used because pure cows' milk was not easily obtainable and because condensed milk was cheaper and could be kept longer without ice than cows' milk. Infants fed on condensed milk are often fat but have, as a rule, feeble resistance when attacked by acute disease, especially of the intestinal tract. Of the 339 babies fed on condensed milk the mothers of 126 were native and of 213 foreign born; of the latter, 107 were Italian, 55 Lithuanian, and 19 Irish.

Even though the figures were large enough to permit accurate deductions in regard to the infant deaths among the infants fed on condensed milk, such a rate would not tell the entire story, as it would not measure the effects of condensed-milk feeding on the survivors. Holt tells us it is rare to see a child reared on condensed milk who does not show some evidence of rickets, and its prolonged use sometimes produces scurvy. It is permissible only as a temporary food and should never be used when good fresh cows' milk can be obtained.¹

Causes for weaning.—The reasons given by the mothers for weaning the 588² babies who were deprived of maternal feeding at the age of 9 months or younger showed that the majority of them believed they were forced to wean their babies, 333 (over one-half) stating that the supply of breast milk was inadequate or had stopped entirely.

Breast feeding is much more universally possible than is generally believed, for scientific research proves that only a few mothers are physically unable to nurse their babies if proper attention is given to the breasts during pregnancy and if persistence and care are exercised immediately following the birth of the baby. Visiting nurses in Waterbury stated that they found among the poorer classes of all nationalities many women whose milk dried before the normal period. Inquiries proved that very few women knew that this could have been prevented by proper diet and care, nor did they realize the importance of breast feeding; particularly was this true of the Lithuanian mothers. One physician who had a large practice among this particular group stated that the Lithuanian women bear beautiful, strong children but are so unwise in their methods of feeding that their babies are peculiarly susceptible to gastric and intestinal diseases.

In every respect the Lithuanian mothers particularly showed need of instruction in regard to prenatal, confinement, and postnatal care. But such care, however excellent, can not entirely neutralize

¹ Holt, L. Emmett. *Diseases of Infancy and Childhood*, 1916, p. 158.

² General Table 23.

the effects of poverty; for poverty brings with it overwork, worry, and frequently insufficient food and clothing, and insanitary surroundings.

However, a great deal can be done and needs to be done in Waterbury, where the mothers of only 32 or 5.4 per cent of the babies who were weaned during the first nine months of life, acted upon the advice of physicians.

Of the other babies weaned during this period, 65 had mothers who were ill and unable to nurse them, 72 had mothers who became pregnant and thought weaning advisable, and the mothers of 22 acted upon their own judgment for various slight reasons. A number of mothers stopped nursing when their babies became ill, thereby robbing them of one of their best defenses against disease; a few mothers admitted they disliked to nurse their babies or found that it interfered with their pleasure; only 7 infants had mothers who were forced to make the change by the necessity of performing gainful work away from the baby.

PERIOD INTERVENING BETWEEN PREGNANCIES.

Pregnancy was given as the cause for weaning 72¹ or 12.2 per cent of the babies weaned at 9 months of age or younger. The native mothers did not become pregnant so soon after the last confinement as the foreign-born mothers, none of the former having become pregnant before the last child was 6 months old while 26 of the foreign-born mothers, 20 of whom were Italians, became pregnant before the sixth month of the last child. In several cases the later pregnancy commenced as early as the third month after the last confinement.

One hundred and thirty-four or 6.1 per cent of the mothers of the 2,197 babies included in this study became pregnant within one year of the infant's birth, of which only 22 or 3.1 per cent were native mothers, although they constituted 32.7 per cent of the total number of mothers.

¹ General Table 23.

TABLE XXIV.—*Births during selected year and number and per cent of births to mothers who became pregnant within one year after birth of infant, according to length of interval between birth and next pregnancy and nationality of mother.*

Nationality of mother.	Total births.	Mothers pregnant within 1 year.		Interval between birth and pregnancy.									
		Num-ber.	Per-cent.	3 mos.	4 mos.	5 mos.	6 mos.	7 mos.	8 mos.	9 mos.	10 mos.	11 mos.	12 mos.
All moth-ers.....	2,197	134	6.1	4	12	10	9	18	13	18	20	19	11
Native mothers..	718	22	3.1	.....	.....	.....	1	5	2	3	5	1	5
Foreign-born mothers.....	1,479	112	7.6	4	12	10	8	13	11	15	15	18	6
Italian.....	651	80	12.3	3	11	6	5	9	9	9	12	13	3
Lithuanian..	267	8	3.0	1	.....	1	.....	1	.....	1	1	2	1
Irish.....	200	10	5.0	.....	.....	1	2	1	.....	2	2	1	1
Other.....	361	14	3.9	.....	1	2	1	2	2	3	.....	2	1

ECONOMIC AND INDUSTRIAL FACTORS.

Occupation of father.—Waterbury's chief industry in 1909, as shown by the 1910 census report ¹ was the manufacture of brass and bronze products, 15 such establishments existing at that time employing 10,031 persons, of whom 9,603 were wage earners and 428 salaried employees.

The majority of the fathers of the families considered in this report belonged to the group of wage earners in the brass manufacturing industries which are included in "Manufacturing and mechanical industries" shown in Table XXV.

TABLE XXV.^a—*Births during selected year in each father's earnings group, according to employment of father.*

Employment of father.	Total births.	Earnings of father.							
		Un-der \$450.	\$450 to \$549.	\$550 to \$649.	\$650 to \$849.	\$850 to \$1,049.	\$1,050 to \$1,249.	\$1,250 and over.	No earn-ings and not re-ported.
All industries.....	2,197	492	316	286	416	308	135	192	52
Manufacturing and mechanical industries.....	1,499	418	242	206	276	193	82	70	12
Trade.....	236	21	27	22	48	44	10	51	13
Transportation.....	132	21	25	19	29	18	12	8	.....
Public service.....	43	7	2	9	1	5	14	4	1
Professional and semiprofessional pursuits.....	52	1	.....	4	4	6	7	30	.....
Domestic and personal service.....	118	14	13	12	33	21	4	17	4
Clerical occupations (all indus-tries).....	72	3	3	10	20	18	6	10	2
Agriculture and forestry.....	15	4	.....	2	3	2	.....	2	2
No occupation.....	18	.....	.....	.....	.....	.....	.....	.....	18
Not reported.....	12	3	4	2	2	1	.....	.....	.....

^a General Table 24.

¹ U. S. Census 1910, Manufactures, Vol. IX, p. 154.

Only 192, constituting 8.7 per cent of the total 2,197 infants, had fathers who earned \$1,250 and over during the year following the birth of the baby.

The 25 factory operatives included in this income group were casters and other skilled laborers, receiving a very high rate of pay. More than one-third of the factory operatives were found to be earning less than \$450 and 982¹ or 94.3 per cent of the factory operatives earned less than \$1,050.

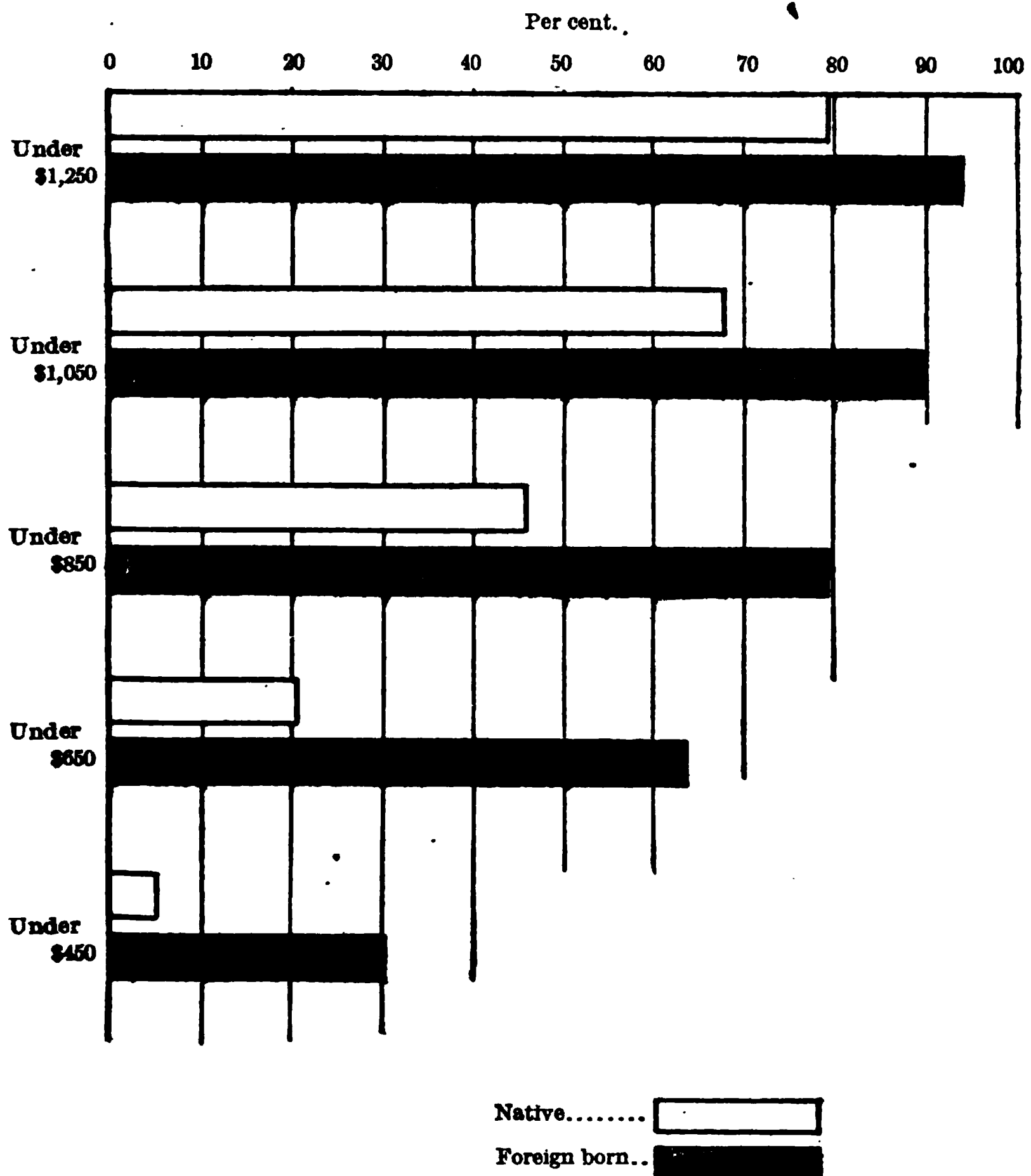
Father's earnings.—The earnings of the father for the year following the birth of the baby for whom information has been secured have been considered in this report as the best procurable index of the economic status of the family. Additional income from such sources as mother's earnings outside the home, from lodgers, children's earnings, or regular supplemental income from relatives indicates that the father's earnings were insufficient to provide for the needs of the family without assistance, and the family with an income so supplemented therefore generally belongs in one of the lowest economic groups. Income from investments indicates that the family had more than sufficient for their daily needs and as a rule the father's earnings would indicate one of the higher income groups as the one in which the family properly belonged.

Of the 2,197² infants considered in this report nearly one-fourth had fathers who earned less than \$450, more than one-third less than \$550, and over four-fifths less than \$1,050. The cumulative chart (Chart VIII) brings out the comparatively large proportion of foreign born in the lower income groups.

¹ General Table 24.

² General Table 25.

CHART VIII.—PER CENT OF BIRTHS TO MOTHERS OF SPECIFIED NATIVITY OCCURRING IN FAMILIES WHERE THE FATHER EARNED LESS THAN SPECIFIED AMOUNT.



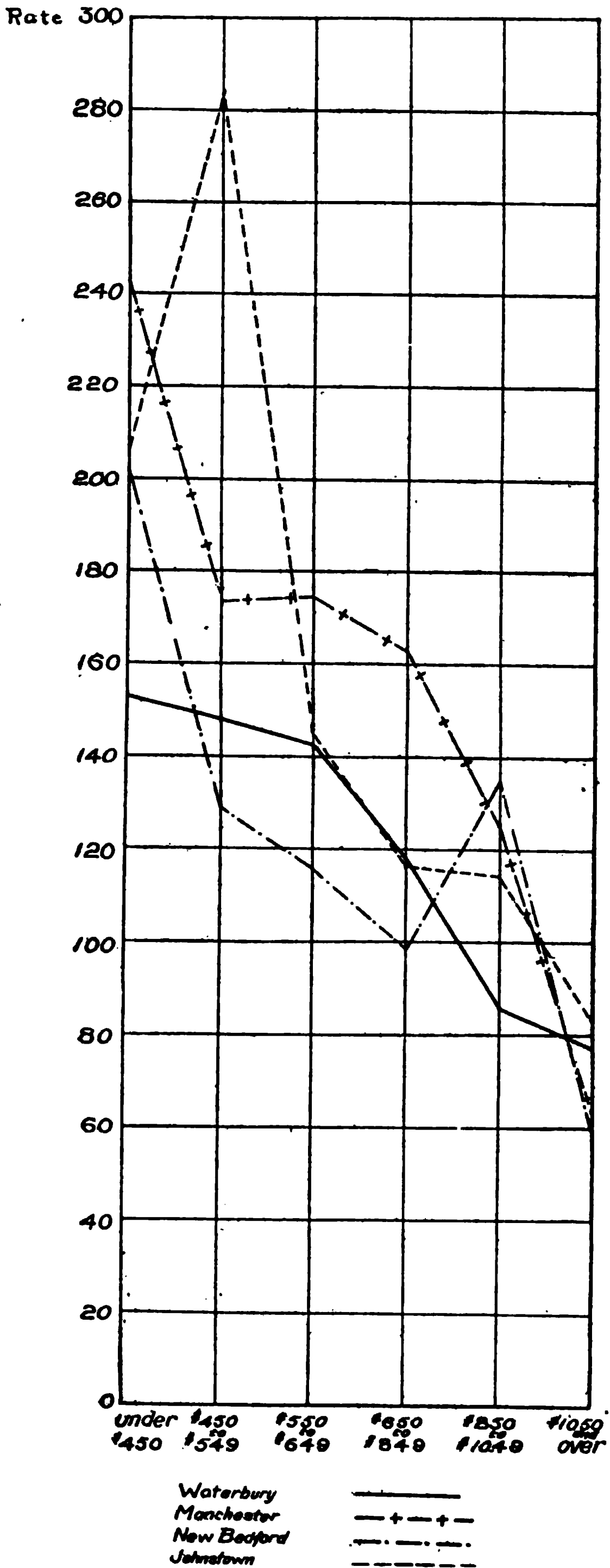
The foreign-born group was much more poorly paid than the native group, 30.6 per cent earning under \$450 for the year, compared with 5.6 per cent of the native. At the other end of the scale 30.4 per cent of the babies of native mothers had fathers who earned \$1,050 or over, while only 7.4 per cent of those in the foreign-born group had such large incomes. Of the infants of native mothers the group whose fathers earned \$650 to \$849 had the greatest number, while of the foreign-born the group earning under \$450 contained more than any other. The Italians and Lithuanians occupied the lowest wage level and the native the highest, while the Irish and other foreign born occupied a position midway on the scale.

Even in the lowest income group the native families had an advantage over the foreign-born group due to the smaller size of the family, an advantage maintained throughout every income group, the average approximating one less member for the native than for the foreign-born families.¹

Infant mortality rate by father's earnings.—The repeated coincidence of the marked and generally regular decline in the infant mortality rate with the increase of father's earnings is strikingly brought out for the four cities charted in Chart IX. Although certain irregularities occur in each curve, these are doubtless due to the small basic figures of the higher income groups.

¹ General Table 26.

CHART IX.—INFANT MORTALITY RATES IN JOHNSTOWN, PA., NEW BEDFORD, MASS., MANCHESTER, N. H., AND WATERBURY, CONN., BY EARNINGS OF FATHER.



The infant mortality rate for Waterbury for babies whose fathers earned less than \$450 during the year following the birth of the baby was 153; the rate very gradually decreased in the next two income groups, but it did not fall below 100 until the group \$850 to \$1,049 was reached.

TABLE XXVI.^a—*Live births during selected year, infant deaths, and infant mortality rate, according to earnings of father.*

Earnings of father.	Live births.	Infant deaths.	Infant mortality rate. ^b
All classes.....	2,144	263	122.7
Under \$450.....	477	73	153.0
\$450 to \$549.....	304	45	148.0
\$550 to \$649.....	280	40	142.9
\$650 to \$849.....	407	48	117.9
\$850 to \$1,049.....	303	26	85.8
\$1,050 to \$1,249.....	134	12	89.6
\$1,250 and over.....	190	13	68.4
No earnings.....	20	4	.....
Not reported.....	29	2	.....

^a General Table 27.

^b Not shown where base is less than 100.

A consideration of rates which include also the earlier born children in each earnings group shows the same relation between the infant mortality rate and income, i. e., that the infant mortality rate decreased as the father's earnings increased. The rate was 158.7 in the group earning under \$550, decreasing steadily until for the group earning \$1,050 to \$1,249 the rate was only 96.6; it increased slightly for the highest income group, but the difference is negligible.

TABLE XXVII.—*Live births resulting from all pregnancies, infant deaths, and infant mortality rate, according to earnings of father.*

Earnings of father.	Live births.	Infant deaths.	Infant mortality rate.
All classes.....	7,507	987	131.5
Under \$550.....	2,949	468	158.7
\$550 to \$649.....	969	125	129.0
\$650 to \$849.....	1,404	163	116.3
\$850 to \$1,049.....	955	96	100.5
\$1,050 to \$1,249.....	435	42	96.6
\$1,250 and over.....	575	57	99.1
No earnings.....	100	24	240.0
Not reported.....	120	12	100.0

Supplementary earnings.—Of the 2,197 babies considered in this report, 1,249¹ or 56.9 per cent were born into families in which the father's earnings supplied the only source of income for the family

¹ General Table 28.

during the year following the baby's birth. In 32.3 per cent of the families other wage earners added to the family income, and in 10.7 per cent the father's earnings were supplemented by other income. Practically all of this supplementary income from earnings of members of the family other than the father was found in families where the father earned less than \$1,050. Only 28 or 3.9 per cent of the births occurring in families where the father's earnings were supplemented by earnings of other members of the family were found in the two highest income groups.

Employment of mother during year preceding birth of baby.—An interesting fact is shown by comparing General Tables 29 and 30. Although the per cent of live-born infants whose mothers were employed the year before confinement was 32.4, only 1.3 per cent higher than the number who worked during the year following the birth of the baby, the mothers of 153 or 7.1 per cent were employed away from home, as compared with 73 or 3.4 per cent during the year following the baby's birth.

The coincidence of a low infant mortality rate with nonemployment of mothers and the much lower rate for infants whose mothers worked at home than for those whose mothers were employed away from home during the year preceding the baby's birth, is brought out in Table XXVIII.

TABLE XXVIII.^a—*Births during selected year, infant deaths, and infant mortality rate, according to employment of mother during year before birth of infant and nativity of mother.*

Employment of mother during year before birth of infant and nativity of mother. *	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^b
All mothers.....	2,197	2,144	263	122.7
Not gainfully employed.....	1,480	1,448	160	110.5
Gainfully employed.....	716	695	103	148.2
At home.....	558	542	71	131.0
Away from home.....	158	153	32	209.2
Not reported.....	1	1		
Native mothers.....	718	705	69	97.9
Not gainfully employed.....	594	583	54	92.6
Gainfully employed.....	123	121	15	124.0
At home.....	71	70	7	
Away from home.....	52	51	8	
Not reported.....	1	1		
Foreign-born mothers.....	1,479	1,439	194	134.8
Not gainfully employed.....	886	865	106	122.5
Gainfully employed.....	593	574	88	153.3
At home.....	487	472	64	135.6
Away from home.....	106	102	24	235.3

^a General Table 29.

^b Not shown where base is less than 100.

Employment of mother during year following birth of baby.—In a city whose industries employ a large number of women it will follow naturally that many are married women with families of small children. Mothers who are obliged to go to work must perforce substitute artificial feeding for nursing and intrust to others the care of their infants. The result is a high infant mortality rate for infants of working mothers. In Manchester, N. H., this rate was 312.9. In Waterbury the number of infants whose mothers were employed away from home during the year following the baby's birth was too small to be a factor in the infant mortality rate for the city; therefore the large percentage of infants artificially fed at an early age and the high infant mortality rate can not be attributed to employment of mothers outside the home. Of the 2,144 live-born infants considered in this report only 73¹, or 3.4 per cent had mothers who were employed away from home at any time during the year following childbirth; and of the 73, 23 had mothers who did not commence work until after the infant's death and 22 had mothers whose work was not resumed until their babies were 6 months old, leaving only 28 or 1.3 per cent of the very young infants whose lives were endangered through the absence of their mothers on account of work.

Relation between low earnings of father and employment of mother.—The effect of low earnings of the father on the mother's employment is shown in Table XXIX, the number of mothers gainfully employed varying inversely with the amount of the fathers' earnings for the three lowest income groups.

TABLE XXIX.—*Births during selected year and number and per cent of births to mothers gainfully employed during year following birth of infant, according to nativity of mother and earnings of father.*

Earnings of father.	All mothers.			Native mothers.			Foreign-born mothers.		
	Total births.	Gainfully employed.		Births.	Gainfully employed.		Births.	Gainfully employed.	
		Num-ber.	Per cent.		Num-ber.	Per cent.		Num-ber.	Per cent.
All classes.....	2,197	682	31.0	718	111	15.5	1,479	571	38.6
Under \$450.....	492	262	53.3	40	20	50.0	452	242	53.5
\$450 to \$549.....	316	124	39.2	46	11	23.9	270	113	41.9
\$550 to \$649.....	286	90	31.5	65	13	20.0	221	77	34.8
\$650 to \$849.....	416	97	23.3	179	29	16.2	237	68	28.7
\$850 to \$1,049.....	308	45	14.6	157	14	8.9	151	31	20.5
\$1,050 to \$1,249.....	135	16	11.9	81	5	6.2	54	11	20.4
\$1,250 and over.....	192	19	9.9	137	12	8.8	55	7	12.7
No earnings.....	22	17	77.3	6	6	100.0	16	11	68.8
Not reported.....	30	12	40.0	7	1	14.3	23	11	47.8

¹ General Table 30.

The figures shown in this table seem to indicate that economic pressure forced the few mothers in Waterbury who did work to take this method of adding to the family income. But only 682 or 31 per cent of all babies had mothers who were gainfully employed during the year following the birth of the baby, which is much lower than the corresponding rate for Manchester, N. H.—43.9 per cent.

Only 15 of these mothers earned \$550 and over, 61.3 per cent, almost two-thirds earning less than \$150 during the entire year. Low as these figures are, they are too high to measure accurately the actual financial assistance rendered by the mother.

TABLE XXX.—Number and per cent distribution of births during selected year to gainfully employed mothers of specified nativity, according to earnings of mother during year following birth of infant.

Earnings of mother.	All mothers.		Native mothers.		Foreign-born mothers.	
	Total births.	Per cent distribution.	Births.	Per cent distribution.	Births.	Per cent distribution.
All classes.....	682	100.0	111	100.0	571	100.0
Under \$150.....	418	61.3	50	45.1	368	64.4
\$150 to \$249.....	127	18.6	22	19.8	105	18.4
\$250 to \$349.....	62	9.1	18	16.2	44	7.7
\$350 to \$549.....	24	3.5	7	6.3	17	3.0
\$550 and over.....	15	2.2	4	3.6	11	1.9
No earnings ^a	2	.3	.....	.....	2	.4
Not reported.....	34	5.0	10	9.0	24	4.2

^a "No earnings" means failure to pay on the part of the lodger.

Lodgers as a source of income.—Five hundred and forty-four¹ live-born infants, constituting 81.7 per cent of the infants whose mothers were gainfully employed during the year following the birth of the infant, had mothers who kept lodgers during this period. These lodgers contributed varying amounts to the family income. A lodger might rent a room from the family solely for his own use, or he might have it with a member of the family or with a fellow lodger; his rental might or might not include the care of the room, his personal laundry work, and mending; he might be a regular attendant at meals with no responsibility for providing the food for them or he might purchase his own food and pay for its preparation. With so many variations of the term "lodger" it was obviously impossible to do more than tabulate the gross receipts from lodgers as "mother's earnings." In some cases this amount was an underestimate, as in the case where the lodger provided his own food, which frequently served to elaborate the family menu; but in the majority of cases it was much too high, as few mothers were found who were willing to admit that keeping boarders was a lucrative occupation. In many cases meals were served simply as an added attraction to the rooms to be rented.

¹ General Table 31.

Nearly one-fourth of the 2,197 infants had mothers who kept lodgers during the year following the baby's birth. This form of adding to the family income was confined almost entirely to the foreign born, only 7.9 per cent of the natives having lodgers while 66.3 per cent of the Lithuanians and 30 per cent of the Italians kept them. In a number of families six or more lodgers were kept at a time, but in the majority of the cases the number did not exceed two. Sixteen per cent of the Irish had lodgers, but seldom more than one at a time.

TABLE XXXI.^a—Births during selected year, number and per cent of births to mothers keeping lodgers, and number of births to mothers keeping specified number of lodgers, according to nationality of mother.

Nationality of mother.	Total births.	Mothers keep- ing lodgers.		Number of lodgers.									
		Num- ber.	Per cent.	1	2	3	4	5	6	7	8	9	10
All mothers.....	2,197	535	24.4	178	164	79	65	23	17	4	2	1	2
Native.....	718	57	7.9	44	10	1	1	...	1	...	...	...	...
Italian.....	651	195	30.0	54	59	40	20	11	5	3	2	...	1
Lithuanian.....	267	177	66.3	30	65	27	35	9	10	1	...	...	...
Irish.....	200	32	16.0	20	7	2	2	...	...	...	...	...	1
Other foreign born.....	361	74	20.5	30	23	9	7	3	1	...	...	1	...

^a General Table 32.

^b Including 3 for whom there was no report.

Size of family and total earnings of family.—Although the total earnings of the family during the year following the baby's birth¹ included the mother's earnings from lodgers, which was not net income, nevertheless it gives a rough measure of the amount which was available for the support of the family.

Not only did certain nationalities tend to have larger families, but the same nationality groups had smaller incomes with which to provide for a greater number, as shown in Table XXXII; 52.1 per cent of the Italians were in the income group under \$550, and of this number 37.2 per cent had 5 or more members in the family; 43.4 per cent of the Lithuanians were in the same income group, with 32.8 per cent having 5 or more members in the family; only 22.5 per cent of the Irish were in the lowest income group, but of this number 44.4 per cent had 5 or more in the family; 9.6 per cent of the natives were in this group, and of these only 13 per cent had 5 or more members in the family. In brief, about one-half of the Lithuanians and Italians, one-fourth of the Irish, and not quite one-tenth of the native were in the lowest income group, but even within this group there are degrees of poverty, determined by the extent to which the income must be spread out over the necessities for a varying number of people.

¹ General Table 33.

TABLE XXXII.—Births during selected year, number and per cent of births in families with total earnings less than \$550, and number and per cent of such births occurring in families with 5 or more members, according to nationality of mother.

Nationality of mother.	Total births.	Births in families with less than \$550 total earnings—			
		Number.	Per cent.	With 5 or more members in family.	
				Number.	Per cent.
All mothers.....	2, 197	639	29. 1	211	33. 0
Native mothers.....	718	69	9. 6	9	13. 0
Foreign-born mothers.....	1, 479	570	38. 5	202	35. 4
Italian.....	651	339	52. 1	126	37. 2
Lithuanian.....	267	116	43. 4	38	32. 8
Irish.....	200	45	22. 5	20	44. 4
Other.....	361	70	19. 4	18	25. 7

It therefore follows that although about the same proportion of Lithuanians and Italians fell in the lowest income group, the Italians as a group suffered greater economic pressure due to the larger percentage of families having five or more members.

NATIONALITY.

The 1,479 infants of foreign-born mothers included in this study represented 24 nationalities, of which the most important numerically were the Italian, Lithuanian, and Irish, as shown in the following tabular statement:

Nationality of mother.	Number of births.	Nationality of mother.	Number of births.
Italian.....	651	German.....	58
Lithuanian.....	267	French Canadian.....	56
Irish.....	200	English, Scotch, and Welsh ^b	40
Slavic ^a	91	All other ^c	55
Jewish.....	61		

^a Including 65 Polish, 20 Russian, 2 Slovak, 2 Bohemian, 1 Serbo-Croatian, and 1 Ruthenian.
^b Including 18 English, 21 Scotch, and 1 Welsh.
^c Including 29 Scandinavian, 7 English Canadian, 6 French, 5 Magyar, 3 Syrian, 2 Greek, 1 Dutch, 1 Spanish, and 1 West Indian Black.

In every community having a large number of recent immigrants it is common experience that the latest arrivals must accept what their predecessors have discarded. This is true of the houses in which they live, the work they do, and the wages they receive.

Infant mortality rate by nationality.—The fact that the infant mortality rate for the infants of foreign-born mothers was 134.8¹ and for those of native mothers 97.9 indicates that Waterbury had failed to insure equal opportunities for infant health for all the nationalities within its boundaries. The high rate for the infants

¹ General Table 2.

of foreign-born mothers was due largely to the rate for the Lithuanians (207.7) and the Irish (184.6); the Italians, who form the bulk of the foreign-born population, having the comparatively low rate of 109.9. As no other single nationality is represented by as many as 100 births, the rates for these nationalities are not significant and hence are not shown in detail. For the 356 cases which constitute all other foreign born the rate is 98.3, practically the same as that for the infants of native mothers.

TABLE XXXIII.^a—*Live births during selected year, infant deaths, and infant mortality rate, according to nationality of mother.*

Nationality of mother.	Live births.	Infant deaths.	Infant mortality rate.
All mothers.....	2,144	263	122.7
Native mothers.....	705	69	97.9
Foreign-born mothers.....	1,439	194	134.8
Italian.....	628	69	109.9
Lithuanian.....	260	54	207.7
Irish.....	195	36	184.6
Other.....	356	35	98.3

^a General Table 2.

When all pregnancies are considered the infant mortality rates for each nationality group, except the Irish, show an increase over the rate for the selected year, but the relative order of the different groups varies. The Lithuanians still stand out with the highest rate, but the rate for the Italians is slightly higher than that for the Irish, the reverse of conditions for the selected year. The variations between the rates for all pregnancies and those for the selected year are shown in Table XXXIV.

TABLE XXXIV.—*Infant mortality rates for all issues and for the selected year, according to nationality of mother.*

Nationality of mother.	All issues.	Selected year.
All mothers.....	131.5	122.7
Native mothers.....	107.9	97.9
Foreign-born mothers.....	139.9	134.8
Italian.....	127.8	109.9
Lithuanian.....	222.5	207.7
Irish.....	125.2	184.6
Other.....	112.0	98.3

Size of family.—The total number of pregnancies according to nationality of mother is interesting as an indication of the tendency of certain nationalities to have large families.

Of the native mothers 82.2 per cent reported no more than four births; 70.3 per cent of the Lithuanians, 64 per cent of the Irish, and

60.6 per cent of the Italians were in the group having no more than four births. Considering the mothers having nine or more births, Table XXXV shows that only 3.3 per cent of the native mothers fell in this group, while 7.9 per cent of the Italians, 7.1 per cent of the Irish, and 6.1 per cent of the Lithuanians had nine or more births.

TABLE XXXV.—*Number and per cent of mothers reporting specified number of births resulting from all pregnancies, by nationality.*

Nationality of mother.	All mothers	1 to 4 births to mother.		9 or more hirths to mother	
		Number.	Per cent.	Number.	Per cent.
All mothers.....	2,155	1,522	70.6	119	5.5
Native mothers.....	704	579	82.2	23	3.3
Foreign-born mothers.....	1,451	943	65.0	96	6.6
Italian.....	634	384	60.6	50	7.9
Lithuanian.....	263	185	70.3	16	6.1
Irish.....	197	126	64.0	14	7.1
Other.....	357	248	69.5	16	4.5

Non-English speaking nationalities.—It is true, of course, that a tendency exists among foreign non-English speaking groups to form communities of their own, wherein they retain their native customs and language. This militates against acquiring a knowledge of the customs and language of the United States and makes the assimilation of these groups slow and difficult. But the city whose industries have invited the immigrant is responsible for his welfare, and the realization of this fact should come first to those members of the community who have longest resided in it. Upon them rests the responsibility for farsighted preventive work which will make the immigrant an asset to the community instead of a menace.

The two most important non-English speaking groups in Waterbury were the Italians and the Lithuanians.

Lithuanians.—A large majority of the Lithuanians lived in the southwestern section of the city known as Brooklyn, along the Naugatuck River, in wards 3 and 4, where they continue their own customs. Although not given to associating with other nationalities they are sociably inclined among themselves, and those who know them find them intelligent, full of fancy and poetry, with a deep-rooted family affection. But toward those with whom they are unacquainted they display a disposition to taciturnity, which gives rise to the popular idea that the Lithuanians are a stolid, indifferent race, little given to demonstration of any sort. Few of the Lithuanians who settle in the cities of the United States are familiar with city life. Lithuania is primarily an agricultural country where the outdoor farm work is shared by men and women alike. One mother

Nearly one-fourth of the 2,197 infants had mothers who kept lodgers during the year following the baby's birth. This form of adding to the family income was confined almost entirely to the foreign born, only 7.9 per cent of the natives having lodgers while 66.3 per cent of the Lithuanians and 30 per cent of the Italians kept them. In a number of families six or more lodgers were kept at a time, but in the majority of the cases the number did not exceed two. Sixteen per cent of the Irish had lodgers, but seldom more than one at a time.

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		Num- ber.	Per cent.	1	2	3	4	5	6	7	8	9	10
All mothers.....	2,197	535	24.4	178	164	79	65	23	17	4	2	1	2
Native.....	718	57	7.9	44	10	1	1	...	1
Italian.....	651	195	30.0	54	59	40	20	11	5	3	2	...	1
Lithuanian.....	267	177	66.3	30	65	27	35	9	10	1
Irish.....	200	32	16.0	20	7	2	2	1
Other foreign born.....	361	74	20.5	30	23	9	7	3	1	1	...

^a General Table 32.

^b Including 3 for whom there was no report.

Size of family and total earnings of family.—Although the total earnings of the family during the year following the baby's birth¹ included the mother's earnings from lodgers, which was not net income, nevertheless it gives a rough measure of the amount which was available for the support of the family.

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¹ General Table 33.

TABLE XXXII.—Births during selected year, number and per cent of births in families with total earnings less than \$550, and number and per cent of such births occurring in families with 5 or more members, according to nationality of mother.

Nationality of mother.	Total births.	Births in families with less than \$550 total earnings—			
		Number.	Per cent.	With 5 or more members in family.	
				Number.	Per cent.
All mother.....	2,197	639	29.1	211	33.0
Native mothers.....	718	69	9.6	9	13.0
Foreign-born mothers.....	1,479	570	38.5	202	35.4
Italian.....	651	339	52.1	126	37.2
Lithuanian.....	267	116	43.4	38	32.8
Irish.....	200	45	22.5	20	44.4
Other.....	361	70	19.4	18	25.7

It therefore follows that although about the same proportion of Lithuanians and Italians fell in the lowest income group, the Italians as a group suffered greater economic pressure due to the larger percentage of families having five or more members.

NATIONALITY.

The 1,479 infants of foreign-born mothers included in this study represented 24 nationalities, of which the most important numerically were the Italian, Lithuanian, and Irish, as shown in the following tabular statement:

Nationality of mother.	Number of births.	Nationality of mother.	Number of births.
Italian.....	651	German.....	58
Lithuanian.....	267	French Canadian.....	56
Irish.....	200	English, Scotch, and Welsh ^b	40
Slavic ^a	91	All other c.....	55
Jewish.....	61		

^a Including 65 Polish, 20 Russian, 2 Slovak, 2 Bohemian, 1 Serbo-Croatian, and 1 Ruthenian.
^b Including 18 English, 21 Scotch, and 1 Welsh.
^c Including 29 Scandinavian, 7 English Canadian, 6 French, 5 Magyar, 3 Syrian, 2 Greek, 1 Dutch, 1 Spanish, and 1 West Indian Black.

In every community having a large number of recent immigrants it is common experience that the latest arrivals must accept what their predecessors have discarded. This is true of the houses in which they live, the work they do, and the wages they receive.

Infant mortality rate by nationality.—The fact that the infant mortality rate for the infants of foreign-born mothers was 134.8¹ and for those of native mothers 97.9 indicates that Waterbury had failed to insure equal opportunities for infant health for all the nationalities within its boundaries. The high rate for the infants

¹ General Table 2.

visited said that from the time she was 7 years old until she was 14 she worked as a shepherdess. Then, being strong enough to do a man's work, she worked in the fields planting and harvesting the crops. She was a short, sturdy woman, with rusty yellow hair, a stout, but powerful figure, and, like many of the Town Plot Lithuanian women, wore no shoes or stockings in the house.

Italians.—Some Italians were to be found in every ward in the city,¹ and those living in the congested sections suffered from all the housing evils described in the special housing section of this report. But their native desire to own a piece of land led many out of the crowded valley to the hilltops, where improvements were nonexistent and land was cheap. Here they could create a mode of life comparable in many ways to that to which they were accustomed in Italy. One colony was found on the outskirts of eastern Waterbury, near Reidville, and another in the northern section of the city, on Chestnut Hill, in the vicinity of Lakewood.

The male members of these groups were forced to arise before 5 o'clock in order to reach the factories in which they worked, and they did not return home until 7 o'clock in the evening. In wet or winter weather the roads leading from these sections to the car lines were almost impassable, but in spite of these difficulties they preferred their hilltop homes to the congestion of the city.

One mother in the Lakewood colony led the agent to the crest of the hill which overlooks the city. She pointed to the blue pool of a disused reservoir in the immediate foreground, the fringe of forest about the edge of the city, and then to the crowded section of the city. The interpreter's literal translation of her words was singularly forceful: "There, dirt and much people; here, beauty and room and garden." These gardens, which were cared for on week days entirely by the women, might well serve as models of intensive cultivation. Each house, whether it was a shack or a modern house, had its own plat of ground, usually defined by a stone fence or a well-kept hedge. Each garden had at least a few grapevines and there were several large vineyards located on the hillside in true Italian style. Practically all the garden produce was consumed by the families themselves. One mother stated that all the food for the family except flour and macaroni was obtained from chickens and the garden.

In the Reidville colony the Italian love of the picturesque found expression in the tinting of the cement of which many of their houses were made.

These rural colonies did not enjoy the modern sanitary conveniences provided for their countrymen who lived in the center of the city, but they had an abundance of fresh air and room and in the

¹ See Table III, p. 24.

summer no doubt they had advantages over the city dwellers. But in the winter the room overcrowding was as great as tenement overcrowding in the city, fresh air as vigorously excluded, and the lack of water-supply and sewage-disposal facilities—serious deprivations at all seasons—created conditions as unfavorable to health as those surrounding the tenement dweller.

Years in United States and ability to speak English.—The extent to which the foreign-born residents of a community can speak English indicates, in a measure, the success of that community in assimilating its foreign-born population.

Of the non-English speaking foreign-born groups in Waterbury the Italians, who came with the last wave of immigration, show a percentage of 17.5 ¹ in the United States less than three years, while 39.8 per cent of their number had been here nine years or more. The most recent arrivals are the Lithuanians, 12.7 per cent having been in this country less than three years and but 32.2 per cent nine years or more.

As the non-English speaking immigrants tend to settle in colonies, length of residence in the United States does not necessarily indicate that they have to any appreciable degree given up the language and customs of their fatherland. If the children do not attend the public schools, it is possible for native Americans of foreign-born parentage to grow to maturity and even become parents themselves without a speaking knowledge of English. Three such mothers were found in Waterbury. More than three-fourths of the Italian mothers and nine-tenths of the Lithuanian mothers were unable to speak English. Thus they were isolated, except for such information in regard to "American ways" as was absorbed from the father or the children.

Of the English-speaking foreign born the largest group was the Irish, who came to Waterbury with the earliest immigration. There have been but few recent additions to their number, approximately 1 per cent of the Irish mothers visited having been in the United States less than three years and more than four-fifths, nine years or longer.

The infant mortality rate for the infants of foreign-born mothers, as shown in Table XXXVI, was 134.8. For the infants of those foreign-born but English-speaking nationalities, such as the English, Irish, etc., the rate was 181.8 as compared with 125.3 for the non-English speaking nationalities. The comparatively low rate for non-English speaking nationalities is largely due to the preponderance of Italians, for whom the infant mortality rate was only 109.9.

Considering the infant mortality rate for non-English speaking nationalities according to their ability to speak English, Table

¹ General Table 35.

XXXVI shows a much higher rate for the group unable to speak English. But this does not hold true for the Italians, the rate for those able to speak English being 122.6, while it is only 105.7 for those unable to speak English, a difference which may not be particularly significant owing to the small number of cases upon which these rates are based. It is, however, a matter of common observation that Italian mothers who do not speak English are successful in caring for their children according to Italian customs, of which the most important is giving the baby breast milk the greater part of his first year of life.

TABLE XXXVI.—*Live births to foreign-born mothers during selected year, infant deaths, and infant mortality rate, according to nationality of mother and her ability to speak English.*

Nationality of mother and ability to speak English.	Live births	Infant deaths.	Infant mortality rate. ^a
All foreign-born mothers.....	1,439	194	134.8
English-speaking nationalities.....	242	44	181.8
Non-English speaking nationalities.....	1,197	150	125.3
Able to speak English.....	370	37	100.0
Unable to speak English ^b	827	113	136.6
Italian mothers.....	628	69	109.9
Able to speak English.....	155	19	122.6
Unable to speak English.....	473	50	105.7
Lithuanian mothers.....	260	54	207.7
Able to speak English.....	19	5	.....
Unable to speak English.....	241	49	203.3
Other foreign-born mothers.....	309	27	87.4
Able to speak English.....	196	13	66.3
Unable to speak English.....	113	14	123.9

^a Not shown where base is less than 100.

^b In addition, 3 native mothers were unable to speak English.

Literacy.—Inability to read and write or to speak English greatly increases the isolation of a mother and thereby lessens her opportunity to profit by the constantly increasing knowledge in matters of health and better living. A large number of the foreign-born mothers in Waterbury were unable to read or write in any language, thus prohibiting any communication with them except through the oral use of their own language.

The number and per cent of illiterates found among the mothers of the 2,197 infants included in this inquiry is given in Table XXXVII. These figures represent a minimum of illiteracy as all claims to literacy were accepted and no tests of any kind were given. There were only four cases of illiteracy among the native mothers. A study of the individual nationality groups included under "foreign born" shows that births to Italians and Lithuanians comprised 88.4 per cent of the births to foreign-born illiterate mothers. The per cent of illiteracy was much higher for the Lithuanians than for the Italians.

TABLE XXXVII.—Births during selected year and number and per cent to illiterate mothers, according to nationality of mother.

Nationality of mother.	Total births.	Births to illiterate mothers.	
		Number.	Per cent.
All mothers.....	2,197	588	26.8
Native mothers.....	718	4	.6
Foreign-born mothers.....	1,479	584	39.5
Italian.....	651	349	53.6
Lithuanian.....	267	167	62.5
Irish.....	200	1	.5
Other.....	361	67	18.6

For both of these nationality groups the infant mortality rate was much lower for the infants of illiterate mothers than for those of literate mothers, as shown in Table XXXVIII. This would indicate that ability to read and write in itself will not necessarily prevent infant mortality, nor is illiteracy, undesirable as it is, sufficient to cause a high infant mortality rate if the mother provides breast milk and intelligent care for the infant. The illiterate mother may be gifted with good judgment or she may have learned through example the proper methods of caring for herself and her baby. But many of the rapidly increasing avenues of public information regarding the most approved methods of infant care are closed to the illiterate mother unless she is given individual instruction either within her home or at an infant welfare station.

TABLE XXXVIII.—Live births during selected year to foreign-born mothers, infant deaths, and infant mortality rate, according to literacy and nationality of mother.

Literacy of mother. ^a	Live births.	Infant deaths.	Infant mortality rate. ^b
All mothers.....	c 2,144	263	122.7
Foreign-born mothers.....	1,439	194	134.8
Literate.....	872	126	144.5
Illiterate.....	565	68	120.4
Not reported.....	2		
Italian.....	628	69	109.9
Literate.....	291	34	116.8
Illiterate.....	335	35	104.5
Not reported.....	2		
Lithuanian.....	260	54	207.7
Literate.....	96	25	
Illiterate.....	164	29	176.8
Irish.....	195	36	184.6
Literate.....	194	36	185.6
Illiterate.....	1		
All other.....	356	35	98.3
Literate.....	291	31	106.5
Illiterate.....	65	4	

^a Persons who can read and write in any language are reported literate.
^b Not shown where base is less than 100.
^c Including 4 births to illiterate native mothers.

Ignorance and superstition.—Ignorance in matters of infant hygiene is not confined to any one group of mothers, nor is all ignorance of the same variety. The inexperienced young mother may lack knowledge of the proper methods of caring for her child; but if she is intelligent and financially able to procure competent medical guidance, her ignorance is not so apt to prove injurious to the child.

Interviews with the mothers of the 651 babies in the Italian group and the 267 in the Lithuanian group brought out strikingly for each group the prominent part ignorance and superstition played in the care given the newly arrived infants of these foreign-born mothers.

Comparatively little superstition was found among the Lithuanian mothers, but, as was pointed out in the section on causes of death, the majority of them accepted the deaths of their children with fatalistic fortitude. One Lithuanian mother of 9 children had lost 6 of them, all but 1 of the 6 dying before reaching the first birthday. She had no idea what caused the death of any except the 3-year-old girl who had been quarantined with measles at the time of her death. Another Lithuanian mother who had borne 9 children had lost 5, none of them reaching the eighth month of life, but she could give no information as to the cause of any of the deaths; the death certificate for the last child stated the cause of death as "marasmus and exhaustion." The same ignorance of the causes of infant deaths was displayed by a Lithuanian mother who had lost 10 of the 13 live children she bore. Their ages at the time of death ranged from 5 weeks to 1 year and not one was premature.

The inquiry also brought to light the fact that many weird superstitions of Italian origin were flourishing with Old-World vigor in the very heart of Waterbury. "Charms" to ward off the glances from "the evil eye" and "charm breakers" for those who had been "bewitched" were, in the opinion of many Italian mothers, important factors in the reduction of infant mortality. That there was sufficient popular opinion to this effect to make "charm breaking" profitable was evidenced by two Italian women who supported themselves entirely by this peculiar occupation.

One mother described, with great emotion, their home in Italy, on the outskirts of Naples. The father left them to go to the United States and three years later sent for his wife and children. Then she said: "Food and beauty—they are not so plentiful in this country; but there are not so many witches, and that is better." When questioned about witches she said that both of her children who died in infancy were perfectly "well, happy, and beautiful" until "suddenly they grew thin to skin and bones and died within two weeks." No doctor could discover the cause. Finally one of the family remembered that the mother had changed midwives, and immediately they

knew that the midwife who had been supplanted was the witch who caused the death of the babies.

An 18-year-old neighbor of this Italian mother came in at this point in the story. She was born in the United States and had been educated in the public schools, but she still held firmly to the traditions of her people. When asked if she believed in witches she said: "Yes, indeed. Of course, to be a witch a girl baby must be born at midnight at Christmas. A boy baby born at that time always has some mark of an animal, such as claws or a patch of fur somewhere on his body. He is never quite right and has not a witch's powers." It was the same girl who told of the two women who sold love potions and charms to ward off the evil eye, and also treated the babies who had been bewitched.

Another Italian mother who had had nine pregnancies had a miscarriage, followed by a stillbirth and another miscarriage; and the last baby died at the age of 15 days. When questioned as to the cause, she simply stated that the last baby had been bewitched. The death certificate showed "capillary bronchitis."

It requires a great deal of patient work to substitute for such deep-rooted superstition a knowledge of and belief in the modern methods of infant care. It is not a task for any one person or group of persons, but it needs the combined forces of the city health department, the local nursing organizations, social workers in all branches, the churches, and the parents themselves.

HOUSING.

The importance of housing, water supply, sewage disposal, garbage collection, and care of the public thoroughfares as factors in a city's health program has long been recognized and often discussed. But as yet no method has been devised whereby the effect of each sanitary defect can be measured and expressed in a mortality rate for any given district. Although in general unfavorable conditions are apt to concentrate in definite areas, frequently one district represents the worst phase of only one condition. The infant mortality rate for that district will indicate in a measure the degree to which the good factors predominated, although the difficulty of measuring the importance of sanitary factors is increased by their interrelation with other conditions which affect infant mortality. For example, it is common experience to find that housing evils exist in sections occupied, through economic necessity, by the poorest paid group, who because of poverty, ignorance, indifference, or lack of opportunity are unable to maintain a standard of living conducive to good health and proper development. The proper care of infants involves a great deal besides the mere prevention of death.

They must be kept in good health and surrounded with such family life as will be conducive to their normal development.

These results can not be secured in dwellings where housing evils exist. Sufficient room, conveniences which minimize the mother's household labors, well-constructed buildings which insure freedom from dampness and drafts, adequate toilets, provision for the admission of sufficient sunshine—all of these react to the welfare of both the infant and the mother, upon whom the infant depends for care. Logically, therefore, housing has a place in the program for the reduction of infant mortality. There is a certain minimum of sanitary safety and convenience which the municipality owes to all of its members, particularly to its youngest, who need every possible advantage in early infancy if they are to develop into physically and mentally valuable citizens. It is a generally accepted principle that every city should require owners of houses or tenements so to build or remodel all places of habitation that the tenants can secure sufficient light, warmth, air, and privacy; that the law should provide that such sanitary conveniences as are now considered necessities for urban dwellings be installed, namely, running water, indoor toilets, bathtubs, and sewer connections; that all these, once installed, be kept in order; and that a sufficient number of inspectors be provided to enforce these provisions. The city, however, has but laid the foundations for housing reform when it has complied with these accepted requirements of legislation. It is also a recognized duty of the city to provide educational facilities in regard to all matters of hygienic living, as the provisions for adequate housing accommodations can easily be nullified through the ignorance of tenants.

Waterbury has a tenement-house act which is designed to cover the needs of the city, but its provisions apply solely to tenements erected since its passage, whereas old buildings are those most apt to be insanitary and in disrepair.

The city had only one tenement-house inspector and one sanitary inspector to enforce the provisions of the law, which in 1910 regulated 7,715 dwellings occupied by 73,141 persons. Both dwellings and occupants have greatly increased in number, but Waterbury has made no provisions for a corresponding increase in the staff of inspectors upon whom rests the responsibility for enforcing the housing laws.

General housing analysis.—In considering the housing problem in Waterbury two methods have been adopted: First, a general housing analysis of the facts secured for the homes in which the 2,144 ¹ live-born babies scheduled resided during the greater part of the year after birth; second, an intensive housing study of six scattered dis-

¹ For the 53 stillborn babies the home visited was the one in which the mother spent the greater part of pregnancy.

tricts selected solely on the basis of the bad housing existing within them.

The 3-tenement dwelling was the prevalent type of home in which the infants considered in this report spent the greater part of their first year, or so long as they survived. The 2-tenement dwelling came next in popularity, followed in decreasing order by the 6, 1, 4, 8, 12, and 5-tenement dwellings.¹ The infant mortality rate increased steadily according to the number of tenements in the dwelling from 88 in the 1-tenement dwelling to 174.4 for the 4-tenement dwelling, and dropped to 157.5 for dwellings of 5 tenements and over.

The location of the building on the lot is considered in Table XXXIX, which shows the infant mortality rate for infants living in alley or rear houses to have been 172, while for those living in houses with street frontage it was 120.6.

TABLE XXXIX.—*Live births during selected year, infant deaths, and infant mortality rate, according to location of dwelling.*

Location of dwelling.	Live births.	Infant deaths.	Infant mortality rate.
All locations.....	2,144	263	122.7
Street.....	2,048	247	120.6
Alley or rear.....	93	16	172.0
Not reported.....	3		

Overcrowding within the dwelling, its sanitary condition, and condition of repair have a close relationship to the health of the tenants, of whom the babies are the most susceptible to surroundings.

A rough measure of overcrowding is shown by the average number of persons to a room,² but the fact of room overcrowding depends upon the actual use of rooms by the individual family. Newsholme takes as a standard that a house is overcrowded when the number of occupants exceeds double the number of rooms in the house. According to this measure the congestion in 4-room apartments³ was greater than in any other, in some cases in both native and foreign-born groups as many as 11 persons living in 4 rooms. Room congestion was much more common among the foreign born than among the native, 6.2 per cent of the former and 1.3 per cent of the latter living in dwellings where the occupants exceed twice the number of rooms.

Certain sanitary factors, such as kind and location of toilet, water supply, cleanliness, and ventilation, are of interest in studying housing conditions, but the data on such items as cleanliness, ventilation,

¹ General Table 36.

² General Table 37.

³ General Table 38.

and condition of toilets, when dependent upon the judgment of several investigators, are not reliable measures.

The kind and location of toilets and the source of the water supply is shown by wards.¹ Privies are admittedly undesirable, but it would be unfair to rate ward 2, in which 14.9 per cent of the toilet accommodations were yard privies, as inferior to ward 1 with only 5.4 per cent privies, unless the indoor toilets of the latter were known to be cleaner, in better repair, and used by fewer persons.

TABLE XL.—*Number and per cent of dwellings in each ward having specified kind of toilet facilities and water supply.*

Item.	Ward 1.		Ward 2.		Ward 3.		Ward 4.		Ward 5.	
	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.
Privy ^a	25	5.4	50	14.9	57	11.6	58	9.9	43	13.3
Toilet not in dwelling.....	55	12.0	78	23.2	118	23.9	227	38.8	141	43.7
Water supply other than city..	19	4.1	47	14.0	48	9.7	19	3.2	27	8.4

^a Including 1 case no toilet, third ward.

The neighborhood, type of house, amount of overcrowding—all are in large part determined by the ability of the family to own their home or by the amount of rent they are able to pay. Of the infants of native mothers 11 per cent, and of those of foreign-born mothers 9.6 per cent belonged in families owning their own homes.² Owning the home indicates an economic status well above the poverty line, and it is significant that the infant mortality rate for the babies of both native and foreign-born mothers who owned their own homes was much lower than for those of the group who rented their homes. For the latter group the infant mortality rate decreased as the rental increased for both native and foreign born. The foreign born paid much lower rentals than the native, an excellent indication that in general the accommodations they secured were much less desirable. However, rentals do not necessarily represent actual value received in accommodations, as land values and the desirability of the neighborhood are important factors to be considered in a study of rentals.

Of the total number of infants whose families were considered, 9.1 per cent were members of complex households. These included young married couples living with the parents of either husband or wife, or vice versa; married couples who were related keeping house together in order to share expenses; and others who for various reasons desired to maintain cooperative establishments. In general the complex families paid higher rentals than the simple families, necessitated in part by the increase in the number of people living in the house and

¹ General Table 39.

² General Table 40.

made possible by the combined resources of two or more family groups.

A study of simple households brings out the fact that \$10 to \$15 represented the prevailing rentals for both native and foreign-born families, but of those renting homes there were 57.5 per cent of the families of infants of foreign-born mothers and 38.5 per cent of those of native mothers who paid this rental. Slightly more than one-third of the native families paid \$15 to \$20 per month rent, while only one-tenth of the foreign-born families were in this group. In this connection it should be remembered that the same rental paid by native and foreign-born families does not mean comparable standards of living, for, as shown in the section on family income, the native family is smaller than the foreign born. A rental which will provide a comfortable home for a family of three will secure for a large family only accommodations which necessitate overcrowding and attendant evils.

In brief, the findings are that a high infant mortality rate was coexistent with living in houses on the rear of the lot or facing the alley, with overcrowding within the apartment, and with low rentals. But even these facts do not furnish a picture of the actual conditions existing in those sections of Waterbury where its worst housing evils were to be found.

Intensive housing study.—Certain housing items, such as lot, dwelling, and room congestion, repair and ventilation of toilets, ventilation of dwellings, and other matters of household sanitation must be observed by the investigator if the facts secured are to be reliable. Since the intensive housing study was designed to supplement the general study by supplying information on these items, it was obviously necessary to shift to a more direct method than that used in the general inquiry. The latter was based on information supplied by the mother regarding the house in which the infant spent the greater part of his first year, while in the former information was secured from personal observation by the agent at the time of her visit.

Six districts in which the housing accommodations were especially unfavorable to hygienic living were selected after consulting the representatives of various social agencies, who were familiar with the entire city. These districts, rather widely distributed geographically,¹ were representative, not of Waterbury's housing as a whole, but of those sections of the city which constituted its housing problem.

¹ District I consists of French, Anne, and Gilbert Streets, located in ward 3, in the angle formed by Willow and West Main Streets; District II, Railroad Hill, runs through the center of the southern half of ward 4; District III, including Brown Street and North Elm Street between Water and Cherry Streets, in ward 1, lies in the angle formed by North and East Main Streets; District IV is a portion of Bank Street forming the boundary line between wards 3 and 4; District V adjoins the northern part of the Bank Street district, extending between Bank, South Main, and Grand Streets and includes Canal, Chatfield, two short alleyways known as Rear South Main, and that portion of Meadow Street lying between Bank and South Main Streets; District VI, Rushton Place, is entered from South Main Street by an alleyway, just south of Meadow Street. For a description of these districts see Appendix B.

Within these selected districts only 141 (Table XLI) of the 2,144 live-born infants included in the infant mortality study spent the greater part of their first year of life; of these, 14 died before attaining the age of 1 year. These numbers are too small to afford a basis for significant conclusions; therefore no attempt has been made to measure the effect of the special housing evils in these districts upon the infant mortality rate.

Composition of districts.—These districts included a total of 211¹ buildings containing 811² apartments (68 of which were vacant at the time of the investigation), in which were housed 5,043³ persons. In these districts every apartment was visited, every toilet and bedroom inspected, and all bedrooms which obviously were not sufficiently large to meet the legal minimum requirement were measured. A special housing card was filled out with information regarding each apartment, house, and premises, by an agent with special training as a housing investigator, thereby insuring technical treatment of the subject and but one standard of judgment. The districts were selected solely with reference to housing; they included 12 nationalities,⁴ native white, native black, Italian, Lithuanian, Irish, Jewish, Polish, French Canadian, Russian, German, English, and Swedish.⁵

The 742 households reported were divided as follows: Twenty-seven or 3.6 per cent native white, 6 or eight-tenths of 1 per cent native black, 408 or 55 per cent Italian, 165 or 22.2 per cent Lithuanian, 50 or 6.7 per cent Irish, 35 or 4.7 per cent Jewish, 26 or 3.5 per cent Polish, and 25 or 3.4 per cent other foreign born. In 141 of these households a birth had occurred during the period under consideration. In three of the districts there were no deaths of the infants included in this study; and the infant mortality rate, based on the total births and infant deaths for the six districts combined, was only 99.3.

TABLE LXI.—*Live births and infant deaths in selected districts, by district.*

Selected district.	Live births.	Infant deaths.
All districts.....	141	14
District:		
I.....	7	.....
II.....	15	1
III.....	13	.....
IV.....	61	6
V.....	42	7
VI.....	3	.....

¹ General Table 41.
² General Table 42.
³ General Table 44.
⁴ In discussing the nationality of households in the special districts referred to on pages 81 to 90 and in Appendix B, the nationality of the head of the household is shown.
⁵ General Table 43.

This low rate is explained in part by the large proportion of births occurring in these special housing districts to the two nationality groups having low infant mortality rates, 95 Italian and 10 native, making a total of 105 or 74.5 per cent of all births in these districts. The Lithuanians also show a low rate, but undoubtedly this is due to the small number included, as consideration of all Lithuanians in the city gives the high rate of 207.7.

TABLE LXII.—*Live births and infant deaths in selected districts, according to nationality of mother.*

Nationality of mother.	Live births.	Survivals.	Infant deaths.
All births.....	141	127	14
Native.....	10	9	1
Foreign born.....	131	118	13
Italian.....	95	85	10
Lithuanian.....	26	23	3
Irish.....	1	1	.....
Other.....	9	9	.....

The wage earners of these districts as a whole, as might be expected, were employed in occupations demanding little skill and consequently offering low wages. Three hundred and twenty-three were employed in the brass factories in occupations ranging from caster to yard laborer; 60 in iron foundries and other iron manufactories; 104 in retail trade as peddlers, small grocers, butchers, etc.; 49 in the building trades in various occupations from carpenter to mason's helper; and 29 as teamsters or truck drivers. There were 56 miscellaneous laborers, and other occupations included teachers, doctors, janitors, street car conductors, and washerwomen.

Lot congestion.—It was found to be impracticable to compute the percentage of area covered on each lot due to the difficulty of measuring lots of irregular shape, the large number of yards used in common by the occupants of several buildings, and the indefinite lot line. Of the premises of the 211 buildings visited, 15 lots or 7.9 per cent were found to be entirely covered, and 83 or 43.9 per cent nearly covered or had only a few square feet of open space.

Number of apartments in building.—Of the 211 buildings visited, 105¹ or 49.8 per cent were 1 or 2 family houses.

These houses contained only 21.2 per cent of all the apartments visited. Four hundred and nineteen or 51.7 per cent of the apartments were in houses containing 6 or more families, 287 or 35.4 per cent in houses of 8 or more families, 189 or 23.3 per cent in houses of 12 or more families, and 87 or 10.7 per cent were in houses accommodating 16 or more families.

¹ General Table 41.

Number of rooms in dwelling.—One hundred and eighty-four¹ or 24.8 per cent of all the apartments, exclusive of those that were vacant, contained 3 rooms or less; 276 apartments or 37.1 per cent, 4 rooms; 164 or 22.1 per cent, 5 rooms; while 118 or 15.9 per cent had 6 or more rooms.

Rentals.—In the districts canvassed there was a wide range of rentals for apartments varying from \$3² to \$8 a month for two-room apartments, from \$4 to \$14 for three-room apartments, from \$6 to \$16 for four-room apartments, from \$7 to \$20 for five-room apartments, and from \$8 to \$32 for six-room apartments, but the average rental per room remained almost stationary, ranging from \$2.62 in six-room apartments to \$3.01 in three-room apartments, while two-room and five-room apartments averaged \$2.85 and \$2.70 per room, respectively, and four-room apartments \$2.76 per room. The average monthly rental of apartments thus increased proportionately from \$5.70 for a two-room apartment to \$15.72 for a six-room apartment. Even within the limited areas described, however, the poorer families were being forced, by the increased rental per room, into the smaller apartments, as has already been shown.

Number of persons and rooms in apartment.—To measure the degree of congestion it is necessary to know not only the size of the apartment but also the number of occupants and whether they are adults or children. The number of persons in the household together with the number of rooms in the apartment is shown in Table XLIII

TABLE XLIII.—*Apartments in selected districts with specified number of persons in household, according to number of rooms in apartment.*

Rooms in apartment.	Total.	Apartments with specified number of persons in household.																			Not reported and vacant.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	20		
All classes...	811	5	44	44	77	97	88	99	96	64	41	40	15	10	10	5	3	1	1	71	
Rooms:																					
1.....	1	1																			
2.....	30	1	10	8	5	4	2														
3.....	153	1	19	19	30	27	25	17	8	5	1	1									
4.....	276	1	7	14	22	36	33	41	44	34	19	12	6	4	2		1				
5.....	164	1	6	2	11	12	20	26	26	19	15	11	4	2	5	2	1			1	
6.....	69				9	11	5	9	8	5	4	11	2	2	1	1	1				
7.....	28		1			5	2	3	8		2	3	1		2					1	
8.....	14		1	1		2	1	1	2	1		1		2		1		1			
9.....	5							2					2			1					
10.....	1											1									
11.....	1																		1		
Not reported..	1																			1	
Vacant.....	68																			68	

¹ General Table 42. ² General Table 45.

To the right of the broken line are shown the number of family groups with two or more persons to a room. There were 240 such families, amounting to 32.3 per cent of the total number reported and including 2,201 persons, or 43.6 per cent, of the total population of these special districts. The high degree of crowding in apartments having two or more persons to a room is exemplified by a family of six living in three rooms. Under such circumstances part of the family must sleep in the kitchen-living room or all six must crowd into the two bedrooms. There were eight instances of families of eight living in three rooms, all eight persons having to sleep in two bedrooms unless the kitchen was used for sleeping purposes. There was one instance of 11 persons living in three rooms. Under these circumstances, even if three persons sleep in the kitchen—which is also dining room and living room—four persons must sleep in each of the two bedrooms. A number of extreme cases may be cited for four-room apartments as follows: Six households with 12 members, four with 13, two with 14, and one with 16, the last showing the extreme congestion of 4 persons sleeping in the kitchen and 4 in each bedroom, or if the kitchen was not used for sleeping purposes, 5 persons in each of two bedrooms and 6 in the other. In addition to the 2,201 persons living in congestion amounting to two or more persons to a room, 183 families, including 1,350 persons, lived in homes congested at a rate of one and one-half but less than two persons to a room, which necessitated using the kitchen for sleeping purposes or two or three persons sleeping in each bedroom. Combining the two groups described we find that 3,551 persons, or 70.4 per cent of the total population of all the districts canvassed were living under conditions of overcrowding at a rate of from one and one-half to four persons per room.

Overcrowding of sleeping rooms.—The legal minimum requirement for sleeping rooms in Waterbury is 500 cubic feet of space for each adult and 300 cubic feet for each child under 12 years.¹ That it is not too high can best be realized by computing the size of a room containing 500 cubic feet of space, in which the legal requirement for height is 8 feet 6 inches. In such a room the floor dimensions are approximately 8 feet by 7 feet 4 inches, a little more than the length of a cot each way. For a child, a room no larger than a fair-sized pantry would meet the legal requirement—one that is 8 feet 6 inches high, with floor dimensions 6 feet by 5 feet 8 inches. Low as this legal requirement is, 3,053² persons, or 60.5 per cent of the total population of these selected districts, slept in rooms which did not meet it. In addition 324 persons, over 6.4 per cent, slept in rooms which had *less than one-half* the legal minimum. There were many extreme instances in which the cubic space fell far below that required

¹ Connecticut Public Acts, 1911, ch. 220, sec. 7.

² General Table 46.

by law, such as that of 2 adults and 3 children, and that of 3 adults and 2 children, for whom the legal requirement was 1,900 and 2,100 cubic feet, respectively, sleeping in rooms containing between 500 and 600 cubic feet of air space, *less than one-third* the legal minimum; another, where 2 adults and 5 children, for whom the legal requirement was 2,500 cubic feet, slept in a room containing between 800 and 900 cubic feet of air space; and again, 3 adults and 5 children in a space containing between 1,100 and 1,200 cubic feet where the requirement was 3,000 cubic feet.

There was considerable variation in bedroom congestion in the six selected districts as shown in Table XLIV and Table XLV, which present, by districts, the total number of bedrooms and the total population of the districts, giving the number of rooms meeting the legal requirements and the number falling below them. Nine hundred and eighty-eight persons, or 77.9 per cent of the population of District V, slept in rooms containing less than the legal requirements for cubic air space. District VI followed with 73.6 per cent, District II with 66.3 per cent, District I with 60.4 per cent, while Districts IV and III had, respectively, 52.4 per cent and 41.3 per cent of illegal bedroom congestion.

TABLE XLIV.—*Bedrooms in selected districts, according to fulfillment of legal minimum requirements of cubic capacity.*

Size of bedrooms.	All selected districts.	District.					
		I	II	III	IV	V	VI
Total bedrooms.....	1,967	131	309	267	782	432	46
Legal.....	1,007	66	146	193	445	137	20
Illegal.....	943	65	163	74	320	295	26
Not reported.....	17				17		

TABLE XLV.—*Number and per cent distribution for selected districts of adults and children occupying bedrooms meeting and not meeting the legal minimum requirements of cubic capacity.*

Size of bedroom.	All selected districts.				District.			
					I			
	All persons.	Adults.	Children.	Per cent distribution of all persons.	All persons.	Adults.	Children.	Per cent distribution of all persons.
All bedrooms.....	5,043	3,498	1,472	100.0	351	249	90	100.0
Legal.....	1,917	1,451	466	38.0	127	95	32	36.2
Illegal.....	3,053	2,047	1,006	60.5	212	154	58	60.4

^a Including 73 persons for whom there was no report.
^b Including 12 persons for whom there was no report.

TABLE XLV.—Number and per cent distribution for selected districts of adults and children occupying bedrooms meeting and not meeting the legal minimum requirements of cubic capacity—Continued.

Size of bedroom	District.							
	II				III			
	All persons.	Adults.	Children.	Per cent distribution of all persons.	All persons.	Adults.	Children.	Per cent distribution of all persons.
All bedrooms.....	765	516	249	100.0	632	423	209	100.0
Legal.....	258	192	66	33.7	351	270	101	58.7
Illegal.....	507	324	183	66.3	281	153	108	41.3

Size of bedroom.	District.											
	IV				V				VI			
	All persons.	Adults.	Children.	Per cent distribution of all persons.	All persons.	Adults.	Children.	Per cent distribution of all persons.	All persons.	Adults.	Children.	Per cent distribution of all persons.
All bedrooms .	1,917	1,338	518	100.0	1,268	908	360	100.0	110	64	46	100.0
Legal.....	852	673	179	44.4	280	200	80	22.1	29	21	8	26.4
Illegal.....	1,004	665	339	52.4	988	708	280	77.9	81	43	38	73.6

^a Including 61 persons for whom there was no report.

Ventilation.—The size of the room, important as it is, forms an index, more arbitrary than exact, to the adequacy of air in that room. The possibility of proper ventilation is equally important, though more difficult to measure with precision. The law requires window space in each bedroom equal to at least one-eighth of the floor area.

Measurements were not taken to show in how many cases this requirement was met, but in most instances inadequate ventilation was not so much the result of inadequate window space as of too restricted an area upon which the window opened. A window opening upon a narrow passage, court, or lot line, or upon a small shaft can not give proper ventilation, no matter how large it may be. Bedrooms opening upon the street have, on the whole, the best opportunity for admitting light and air. There were 705 such bedrooms, or 35.8 per cent of the total number.

TABLE XLVI.—Bedrooms in selected districts, according to character of outlook.

Character of outlook.	Total bed- rooms.	District.					
		I	II	III	IV	V	VI
All bedrooms.....	1,967	131	309	267	782	432	46
No window.....	46	.....	.....	.....	37	9	.....
Inside window.....	20	.....	.....	.....	16	4	.....
Shaft.....	15	.....	.....	.....	14	1	.....
Lot line.....	13	.....	.....	3	9	1	.....
Court.....	104	.....	.....	.....	84	20	.....
Passage.....	555	54	52	99	212	138	.....
Porch.....	60	3	4	.....	29	24	.....
Alley.....	1	.....	.....	1	.....	.....	.....
Yard.....	427	22	145	68	95	51	46
Street.....	705	48	101	95	281	180	.....
Not reported.....	21	4	7	1	5	4	.....

Four hundred and twenty-seven or 21.7 per cent of the bedrooms had an outlook upon yards which, though varying in size, probably give the next best opportunity for adequate ventilation. Sixty bedrooms had windows opening upon porches which partially shut out light and air from the rooms. Five hundred and fifty-five bedrooms opened upon passages which, while varying from 6 inches to 6 feet in width, generally did not afford adequate light and ventilation. To a still greater extent did this apply to courts upon which 104 bedrooms opened, and to lot lines (passages 6 inches or less running along the lot line) upon which 13 bedrooms opened. The disadvantages of a bedroom opening upon a shaft of any size are obvious; sometimes the odor of stale air, accumulated rubbish, and dirt is so foul that the window can not be opened at all. Fifteen bedrooms were found having no other openings than those upon a shaft; 20 had no windows other than those opening into another bedroom, kitchen, or hall; 46 contained no windows whatever. In all, 66 bedrooms had no opening upon the outside air, and a total of 707, or 35.9 per cent of all bedrooms, had no better outlook than passage, court, lot line, shaft, or inside room, all of which may be considered inadequate.

Household sanitation.—Serious as the problem of overcrowding is, it is no more serious than the problem connected with household sanitation.

Toilets, their number, location, and condition, are the most important of sanitary conveniences. This special housing study includes 620¹ toilets serving 5,043 persons. Five hundred and eleven, a large majority of the toilets, were each used by one family only, 82 by two families, 11 by three families, 15 by four families, and 1 by six families. The number of persons using a single toilet was often very large; 117 toilets each accommodated from 10 to 14 persons, 28 toilets were used by 15 to 19 persons, 10 by 20 to 24 persons, and

¹ General Table 47.

8 by 25 or more persons. In the group used by 25 or more persons one toilet was used by 32 and one by 33 persons. Combining these groups, we find 2,236 persons, 44.3 per cent of the total population, using toilets which must accommodate 10 or more persons.

In 390 instances toilets were located within the apartment; 125, about one-fifth of the total number, in the hall, 30 in the basement or cellar, 18 on the porch, and 12 (exclusive of privies) in the yard. The 45 dry yard privies constituted 7.3 per cent of the total number of toilets, the 476 persons using them equaling 9.4 per cent of the total population of these districts, an average of 10.58 persons per privy. Hall and porch toilets show an average of 10.22 and 10.78 persons, respectively, per toilet, while yard water-closets show an average of 12.25 persons. Apartment and basement or cellar toilets with averages of 7 and 7.27, respectively, show the lowest average number of persons per toilet.

Not only were the hall, porch, and yard toilets commonly used by a larger number of persons than the apartment or even the basement toilets, but they were usually unlocked and so open to more promiscuous use. They were also apt to be used by more than one household, thus dividing responsibility and with it the chances of cleanliness.

Only 204, 35.5 per cent, of the water-closets reported were in good condition. In 71 instances filth was found in the compartment or on the bowl or seat, a serious condition, since disease germs (such as those of typhoid fever and gastric and intestinal diseases) may be spread by the flies which find a breeding place here. In 269, almost one-half of all the water-closets reported, the bowl or fixture was found corroded or discolored and the enamel facing broken off, making a rough surface impossible to keep clean and often caked with a black, slimy deposit. Very few of the water-closets visited were free from odor, but this was not especially noted except in 160 cases, where it was so bad as to pervade the apartment and often the entire hallway or house. The uncleanness of the toilet was frequently caused by its poor repair as well as its use by too many persons. Twenty water-closets did not flush at all at the time of inspection, while 174 did not flush adequately; 249 were found leaking sufficiently to keep the floor wet; and in 77 the seat was either broken or entirely gone. In some instances it had been patched with pieces of tin with rough, rusty edges, or with pieces of leather or unfinished splintering wood fastened with nails sometimes having large rusted heads. Such a condition not only causes discomfort, but may cause serious infection. Only 199, a little more than one-third, were found in good repair.

Closely allied with the condition of the water-closets are the means of lighting and ventilation. One hundred and ninety-two water-

closets, 33.4 per cent of the total number, were found to be light; 207 or 36 per cent were designated as gloomy, and 154 or 26.8 per cent were reported as dark.

Equally important is the possibility of ventilating the toilet and renewing the air which is being constantly vitiated by unclean, broken fixtures. One hundred and five water-closet compartments had no windows whatever, and 48 had windows which did not open either because fixed in the frame and never made movable, or because nailed tight by the landlord, as was found in several instances. In a few cases the compartments without windows were fitted with small ventilating flues, but they seemed to be of no practical value, and the two groups described, 26.6 per cent of the water-closets, were for all practical purposes without any ventilation. Add to these 198 compartments fitted with windows which opened but were inadequate because opening upon small shafts or narrow passages, and the result is a total of 351 water-closets, 61 per cent of the total number, which were inadequately ventilated.

Housing evils in other sections of city.—All the conditions described—the dark insanitary toilets, the crowded ill-ventilated bedrooms, the small congested apartments, the damp cellars, and the yards made foul by uncollected garbage, drainage from sinks or yard privies—all these were found not only in the districts canvassed but in other sections of which those districts were typical. The large tenement type, for example, was found also along portions of South Main, East Main, and Baldwin Streets. On Spring, Brook, School, Scovill, Phoenix, Jefferson, and Union Streets were found types similar to those described in Districts III and V. Parts of South Leonard Street, South Riverside Street, Lafayette Street, and especially River Street had a type of house similar to that in the worst portions of Railroad Hill, and on a part of River Street were found corresponding conditions of yard privies.

CIVIC FACTORS.

INFANT-WELFARE WORK.¹

In many of our large cities high infant death rates caused largely by unwise feeding of the infants have been lowered through the establishment of infant-welfare stations where well infants are kept in good health through supervision of their feeding, formulas being prescribed by a physician after examination of the infants. The infant-welfare nurse visits the home and instructs the mother in the proper method of preparing the formula and in other matters of hygiene relative to the infant's health. Frequent visits to note the child's condition result in warding off, through early detection and

¹ See Appendix A for report on development of infant-welfare work since the close of the investigation.

treatment of seemingly slight symptoms, many illnesses which might otherwise prove severe.

Visiting nurses association.—At the time this investigation was made there were no infant-welfare stations in Waterbury and the only agency which avowedly did any work for either sick or well babies was the visiting nurses association. Two visiting nurses were assigned exclusively to the work for infants. They received their cases from physicians and social agencies and from personal applications on the part of families. These two nurses did not care for confinement or contagious cases. The greater part of the work was done for sick children, although a little instruction was given for any well children whose mothers wished advice in regard to weaning.

Obviously two nurses can not adequately care for even the sick babies in a community of almost 83,000. It naturally follows that preventive work with this inadequate number of nurses, if done at all, will be more or less haphazard, for no constructive plan can be made and carried out without an adequately supported staff of sufficient size.

Free milk.—At the time of this investigation no milk stations existed in Waterbury, but the visiting nurses association received annually from the city \$400 for the purchase of milk to be distributed free to any person recommended by the association. Some of this milk was given to mothers for the babies, but the greater part was given to invalids.

Ice.—This association also distributed ice boxes and ice tickets during the summer. The work was necessarily very limited owing to lack of funds. It was, however, felt by the nurses to be a very important factor in the health of artificially-fed babies, as without ice the mothers could not keep cows' milk in condition fit for use.

Little Mothers' League.—The Waterbury Girls' Club organized a Little Mothers' League, consisting of 78 little girls, who met at Leavenworth Hall three times a week for 30 weeks to receive instruction from a visiting nurse in the proper methods of caring for babies. Many of these children were daughters of non-English speaking parents, so that the children themselves became instructors of their mothers in the American methods of raising babies.

COUNTY HEALTH OFFICER.

The county health officer's duties include the supervision of local health officers, authority in case of local epidemics, responsibility for rural conditions, and enforcement of the law relating to vital statistics.

CITY HEALTH DEPARTMENT.

The Waterbury department of public health consists of a board of five commissioners, a clerk, 1 health officer, 1 sanitary inspector, 1 tenement house inspector, 1 milk and food inspector, 1 supervisor of garbage, 2 medical inspectors of schools, 1 bacteriologist, and 2 school nurses.

These are all full-time positions with the exception of the health officer, who is expected to plan and supervise the work of his entire department by devoting to it only a few hours a day and he receives therefor the exceedingly small compensation of \$1,200 per annum.

In his report for the year 1914 the health officer states:

This department had at its disposal, for the year 1914, \$29,864.75. Of this amount \$14,188 was allowed for collection and disposal of garbage, leaving for actual health work \$15,676.75, or approximately 17.7 cents per capita.

How inadequate this amount is, is brought out in "A Survey of the Activities of Municipal Health Departments in the United States,"¹ which says:

Far too many of our city health departments undertake far too little in proportion to their opportunities; on the other hand, all too few receive an anywhere near adequate appropriation. Under the circumstances one may reemphasize the suggestion that there should be a minimum yearly per capita figure for a modern department—a kind of minimum wage. The suggestion is not new—having been made by Park in 1911, the figure set by him ranging from 50 cents to \$1 according to the size of the city, and by the committee on activities of municipal health departments of the American Public Health Association, its figure being 50 cents. Certainly 50 cents for real preventive measures would be an entirely reasonable figure, and in all probability the time is not far distant when our cities will allow their health departments a dollar a head—an amount still moderate when compared with that spent for police or fire protection.

In his report the health officer calls attention to the fact that—

Failure to make appropriations for the establishment of milk stations has curtailed this department's influence in its fight against infant mortality. A list of births occurring during the summer months has been compiled by the department, and literature instructing mothers as to the proper care of children has been distributed.

This was the first effort of the kind on the part of the health department, which heretofore, through lack of funds and an insufficient corps of workers, had never been able to do any educational preventive work to reduce infant mortality.

Milk supply.—In the year 1914 Waterbury did not require pasteurization nor the bottling of any of the milk sold within the city, two things which vastly increased the responsibilities and duties of the one inspector, who could not adequately supervise the milk supply for a city with a population of almost 83,000. His duties also included the supervision of all dairies, vehicles, milk cans, stores where milk was dispensed, and the collection of samples for analysis.

¹ Schneider, Franz, Jr., pp. 21, 22.

In the same year an ordinance was passed requiring retail dealers to cleanse all milk cans before returning them to the dairies. According to the report of the health officer the result was a marked decrease of the bacteriological count in samples of milk obtained in certain districts.

The milk and food inspector stated that at least four times each year he visited every farm which supplied milk to the city of Waterbury. His inspections, so far as possible, were made at the milking hour to enable him to inspect the conditions under which the milking was done.

An ordinance requires that "immediately after each cow is milked the milk shall be strained through a fine wire gauze and a layer of absorbent cotton protected on either side by a piece of cheesecloth." But nowhere in the ordinance is it stipulated that these articles for straining shall be sterilized, and when questioned on this point the inspector said that he sometimes found them quite dirty.

The State of Connecticut forbids the use of milk containing more than 1,000,000 bacteria per cubic centimeter. In commenting upon this, State Bacteriologist Prof. Henry W. Conn, in his 1912 report, said:

While it is thus recognized that bacteriological analysis is of extreme value in determining the quality of milk, it is difficult or impossible to set any bacteriological standard that shall be of equal value in large and small communities. The milk distributed in large cities is on the average older, since it has a much longer transportation than that delivered in the smaller ones, and this inevitably produces the higher count * * *. If, therefore, a bacteriological standard is to be required, it must be graded according to conditions. For example, the last legislature in this State adopted the standard of 1,000,000 bacteria per cubic centimeter. This standard may be reached with the very greatest ease in all of the towns in the State, and beyond question, in the ordinary small communities, much milk which passes this standard may have been produced under careless conditions, have been carelessly handled, or may be too old for proper sale. Hence this standard of 1,000,000 bacteria is no incentive whatsoever to dairymen furnishing small towns to increased carefulness in the handling of the milk, because it can be reached without any special care; and emphasis upon such a standard would decrease, rather than increase, the attention which is given by the dairymen and the milk producer to furnishing satisfactory products. * * * Dairymen in Connecticut * * * have no difficulty whatsoever in producing milk with a bacterial content far superior to that of the standard set by law, and in our communities milk with bacteria above this standard should be unhesitatingly condemned.¹

The city of Waterbury recognized the need for more stringent legislation and accordingly passed a law that no person should bring or send to Waterbury any milk containing over 300,000 bacteria per cubic centimeter.

Even this standard is not difficult to attain. Dr. Grulee says:

A count of over 100,000 bacteria per cubic centimeter is certainly not fit for use in nourishing the infant, but a count of 10,000 or below is desirable.²

¹ Connecticut State Board of Health, 1911-12, pp. 153, 154.

² Grulee, Clifford G. *Infant Feeding*, 1914, p. 121.

The bacteriological count is made in the city bacteriological department, where disease cultures are also examined; for the year 1914 the bacteriologist examined 1,098 samples of milk for their bacterial content, only 6 of which were found to contain bacteria in excess of the legal maximum.

Two days a week the inspector devoted to inspecting the 350 licensed shop venders of milk. The limited amount of time and the fact that he had no assistance made it impossible for him to inspect them as frequently as desirable.

When a shop is under suspicion of selling low-grade milk and has been reported to the inspector, samples of the milk are tested first from the shop, then from the milk depot from which the milk is distributed, and if necessary are traced back to the farm and to the cows.

Waterbury milk is tested in three ways: (1) By the bacterial count, (2) by straining through fine gauze for dirt, and (3) by qualitative analysis, i. e., to determine the per cent of fat, water, and milk solids.

For the year 1914 the inspector reported the inspection of 550 dairies, 626 stores, and 249 vehicles. In addition, 1,309 samples of milk were examined for dirt and solid contents. Of these, 28 were found below standard.

Garbage collection and disposal.—An important phase of household sanitation is the regular and frequent collection of garbage. Waterbury had, at the time of this investigation, a city ordinance which provided that garbage, ashes, and rubbish should be kept separate; but the superintendent of garbage disposal stated that the city collected the garbage even when mixed with ashes or rubbish to avoid discussion with the tenants. These collections, the ordinance provided, were to be made twice a week from November 1 to May 1 and three times a week the remainder of the year. There was no systematized method of garbage disposal. On days when collections were made the farmers drove in toward Waterbury until they met the garbage wagons. The garbage was then transferred to the farm wagons and hauled to the farms, where it served as food for hogs or as fertilizer. In 1914 the health officer reported¹ that as there were 311 collection days during the year, the annual amount removed was about 12,440 tons. Of this amount one-half was collected by the city teams and the remainder by private collectors.

Ashes and rubbish disposal.—Ashes and rubbish were not collected by the city, but the owner of the house, or in some cases the tenant, was responsible for their removal. As this involved expense and trouble, carelessness naturally resulted. About 50 firms and drivers

¹ Annual Report of the Health Officer of the City of Waterbury, 1914.

were licensed to collect ashes and rubbish, which they must remove from the city, use for filling in their own land, or dump at points (new streets which were being graded or filled in) designated by the superintendent of streets. The street sweepings and manhole and sewer-cleaning wastes were also used with ashes for street grading, except in winter, when they were taken to Brookside, the city poor farm, to be used as fertilizer.¹

In the districts in which the intensive housing study was made families reported and evidence proved that collections were made very much less frequently than was officially planned. Health laws, moreover, required a covered receptacle of prescribed sanitary type, but this requirement was generally evaded in the special districts canvassed, the garbage frequently being piled in the yard. On Railroad Hill the city apparently made few garbage collections, and the families not feeding the garbage to chickens simply "pitched it down the bank."

Along North Leonard Street obnoxious conditions were found to exist, particularly on the rear lots where garbage and piles of tin cans had accumulated for many weeks, and no steps had been taken by the landlords, tenants, or city to remove them or to make provision for proper containers. Such conditions of accumulated filth result in breeding large swarms of flies, which may become carriers of disease germs. Along the east side of North Riverside Street the back yards border on the Naugatuck River, which suffers, as do most Connecticut streams, from uncontrolled sewage and waste pollution.

Factory waste and sewage disposal.—Factories commonly disposed of their waste by emptying it into the streams, in direct violation of the city ordinance. Both chemicals and oils in factory waste are objectionable and in many places discolor the streams and render them foul smelling. At low water decomposing sludge and other deposits could be seen all along the banks of the river. Including the private sewers, many of which were most insanitary as a result of their insufficient size, the city had only 55.9 miles of sewers, leaving 71.7 per cent of the 198 miles of streets without provision for sewage disposal.² This is largely due to the excessive expense of installing any underground service in Waterbury. The city is built upon a rock foundation and all laying of pipes necessitates extensive blasting, which is both a slow and expensive process.

The disposal of waste from dry privies and cesspools was not cared for by the city, nor was its disposal by private property holders supervised.

¹ This practice has been discontinued.

² See map facing p. 97.

WATER SUPPLY.

The city of Waterbury is supplied with water from two large reservoirs 12 miles northwest of the city and two smaller subsidiary reservoirs on the southeast boundary of the city. The latter form a separate system known as the high service and are partly supplied by pumping from the low service. The combined capacity of all reservoirs is 2,950,000,000 gallons.

The city owns all of the land immediately adjoining the watersheds for all reservoirs. No one lives upon the city's land except the caretakers, for whose dwelling a special sewer and drainage system was installed in order to protect the water supply. The entire watershed for all reservoirs embraces about 30 square miles, of which the city owns about 3.

The dam at Morris Reservoir contains an elaborate system for aerating the water as it is drawn into the Wigwam basin. The report of the city engineer says:

For this purpose four aerating sluices were built in the masonry of the weir wall and connected with the gate chambers of the service-gate house. They are at elevations corresponding to elevations of inlet gates which admit water from the reservoir to the gate chambers and permit of giving the water a maximum exposure to the air in passing from one lake to the other.¹

There is no filtration system, but the water is stored for various periods of time. Rosenau says:

Very few parasites pathogenic for man multiply in water under natural conditions. In time they all die out. Hence a stored water is reasonably safe. In addition, the organic matter undergoes decay and returns to its simple mineral constituents. Hence a stored water will in time free itself not only of harmful parasites but also of most of its organic pollution.²

The water supplied to Waterbury during seven or eight months of the year has been held in storage for a period of from one to several months. But during the late winter and early spring the melting snow greatly increases the contents of the reservoirs, frequently causing them to overflow. During such periods it is possible for water which has been in storage only a few days to become part of the city's water supply.³

Examination of the water supply is made by the State, the samples being collected and supplied by the city water department. From June, 1913, to May 31, 1914, the East Mountain system supply of Waterbury received 12 examinations, the Wigwam Reservoir supply 8, and the Prospect Reservoir 5 examinations. No colon bacilli were found at any examination, and the number of bacteria per cubic centimeter for the entire 25 examinations was under 100 at 13

¹ Municipal Register, 1913, Waterbury, Conn., City Engineer's Report, p. 28.

² Rosenau, Milton J. Preventive Medicine and Hygiene, 1917, pp. 881, 882.

³ Since this investigation the city has installed apparatus for treating the water with liquid chlorine during the overflow period, thereby insuring a safe water supply.

BPOSAL

examinations. In October, 1913, the reading of the East Mountain system was 2,370 bacteria per cubic centimeter, and it was 3,500 in the same month for Wigwam Reservoir and only 480 for Prospect Reservoir.

The typhoid-fever record of a city is generally accepted as some indication of the purity of the water supply. In his annual report for 1914 the health officer of Waterbury says:

The city is to be congratulated upon the few cases of typhoid fever occurring during 1914. There were but 32 cases reported during the year, as compared with 105 of the year previous. There was but 1 death from the disease. In no instant [instance] could any evidence be obtained that would lead to the belief that local conditions caused the disease. A pure water supply and an absence of unsanitary places is responsible for our freedom from typhoid fever.

At the time of this inquiry there were 91.78 miles of main water pipe 4 to 36 inches in diameter, with branch pipes running parallel to this on streets where houses were supplied with city water. The main and branch pipes were connected with gates, the houses being supplied from the branch pipes. There were a few private mains, but 106.22 miles or 53.6 per cent of the street length of the city were not supplied with city water. Some thickly populated areas were obliged to depend entirely upon wells for their water supply. These were largely dug wells, with inadequate protection against surface drainage, and were frequently placed in dangerous proximity to stables and privy vaults.

Every apartment in the districts specially studied for housing conditions was supplied with running water. In those parts of the city that were supplied with city water only one house was reported that did not have running water piped into it. In this, a two-story cottage, the only faucet was in the musty and ill-smelling cellar, with a ceiling so low that it was impossible to stand erect. The occupant of the cottage, the mother of one of the babies scheduled in the infant mortality investigation, reported that the cellar was always flooded in winter. There was a sink without a faucet in her pantry, but as it was not connected with any drain pipe she threw the waste water into the yard.

The map showing the distribution of the city water supply brings out clearly the need for extended service, particularly in outlying districts.

STREET PAVING.

The Waterbury housewife suffered from the condition of the streets, which were a source of mud in wet weather and dust and dirt in dry weather. Of the 198 miles of streets, 180.7 or 91.3 per cent had no paving, 10.5 miles or 5.3 per cent were paved with what is termed "permanent paving," and 6.7 miles or 3.4 per cent with macadam. The street cleaning was done by a corps of men

in white uniforms and the small section of the city possessing paved streets was kept in good condition. The greater part of the city, however, in spite of oiling or sprinkling, suffered from ill-kept roads. In those sections lying on the steep hillsides, snow in winter, claylike mud in wet weather, and deep ruts partly filled with rocks in dry weather discouraged the residents from unnecessary travel. In some instances the situation works a real hardship, as was illustrated by the cases of families unable to obtain fresh milk for the children because of the impassable condition of the hillside roads during the greater portion of the year.

SUMMARY AND CONCLUSIONS.

The causes of infant mortality are numerous and infinitely complex, and effort directed along only one or two lines of improvement will not reduce the infant death rate to the minimum attainable.

This investigation adds to the evidence that infant deaths are more frequent among the families with insufficient incomes and the accompanying evils, such as insanitary surroundings, improper housing, unsuitable and insufficient food and clothing, lack of proper medical attention, and the necessity of adding to the family income through the employment of the mother.

Registration of births.—All cities, particularly those within the registration area, should find their starting place for the reduction of infant mortality in the records of their vital statistics, but this was not possible in Waterbury. For the period under consideration 331 or 12.5 per cent of all births were found not to be registered. Over one-half of all these unregistered births were of the infants of Lithuanian mothers, the group having the highest infant mortality rate, 207.7.

Infant mortality rate.—Of the 2,144 live-born infants upon which this study is based 263 died, giving an infant mortality rate of 122.7. Division of the city into wards shows ward 4 with the highest rate (150.1) and ward 2 with the lowest rate (70.6). These rates, however, are not so significant as those for the various nationality groups.

Nationality.—The rate for the component nationality groups was 207.7 for the Lithuanians, 184.6 for the Irish, 109.9 for the Italians, and 97.9 for the native. The high rate for the foreign born suggests that some of the groups of the foreign born did not enjoy equal advantages with the native families.

A little less than one-third of the births included in this report were those to native mothers, while slightly more than two-thirds were to the foreign-born group; of the latter the chief groups were the Italian with 651 births, the Lithuanian with 267, and the Irish with 200.

Medical cause of death.—Gastric and intestinal diseases caused over one-third of all the infant deaths considered. The per cent of deaths from this group of causes is exceedingly high, being 9.2 per cent higher than that for the registration area in 1914.

Gastric and intestinal diseases caused one-half the deaths of Lithuanian babies, one-third of those among the Irish, approximately the same proportion among the Italian, and slightly more than one-fourth of the deaths among the other foreign born and among the native. Diseases peculiar to early infancy caused about one-third of the infant deaths, but the per cent of deaths from this group of causes and that from respiratory and epidemic diseases were lower than the corresponding proportions for the birth-registration area.

Stillbirths.—Incomplete registration of stillbirths made analysis of stillbirths for the year under consideration impracticable. But study of all stillbirths resulting from all pregnancies of all mothers interviewed brought out the fact that the stillbirth rate was highest for the Italians and lowest for the Irish; the rate for the Lithuanians was only about one-half that of the Italians.

Attendant at birth.—Physicians attended 95.7 per cent of the births to native mothers and but 52.2 per cent of those to foreign-born mothers. The foreign-born group had 43.4 per cent attended by midwives, but only 3.8 per cent of the native births were so attended. No supervision by public or private authorities was exercised over midwives except that a registered license to practice was required; yet one-third of the births in this study attended by midwives only, were attended by unlicensed practitioners.

Feeding.—A large percentage of artificially fed babies was accompanied by a high mortality rate for infants of foreign-born mothers, but the native group maintained a low infant mortality rate in spite of a high percentage of artificial feeding.

Although the native group, in accordance with general findings, substituted artificial for maternal feeding earlier than the foreign born, consideration of the nationalities composing the latter group showed the Lithuanians with the highest percentage of early artificial feeding.

Income.—Waterbury has contributed to the rapidly accumulating evidence which establishes the coincidence of poverty and a high infant mortality rate. For the families in which the fathers earned less than \$450 during the year following the birth of the baby, 153 out of every 1,000 babies born alive died before reaching their first birthday. Although the rate decreased as the father's earnings increased, it did not drop below 100 until these earnings exceeded \$850.

Nearly one-third (30.6 per cent) of the fathers of infants having foreign-born mothers earned less than \$450 during the year under

consideration and only 7.4 per cent of them earned \$1,050 or more. On the other hand in the native group there were only 5.6 per cent earning less than \$450, while 30.4 per cent of them earned \$1, 050 or more. In connection with these figures a consideration of the fact that the native families were much smaller than the foreign born brings into prominence the tremendous financial disadvantage under which the foreign-born population lives and labors.

Conclusion.—Waterbury's infant mortality rate of 122.7 is largely the result of deaths from preventable causes; practically all the deaths from gastric and intestinal diseases, a large proportion of the deaths peculiar to early infancy, and many of the deaths from respiratory and epidemic diseases can be prevented.

The work of prevention should begin with complete birth registration, which involves securing the passage and enforcement of a law requiring more immediate registration of births. In addition a system must be evolved to provide suitable obstetrical care for every mother.

Stillbirths and the large number of deaths in the early weeks of life suggest the need for complete prenatal care, involving obstetrical clinics where frequent examinations of the mothers are made during pregnancy, nurses to make prenatal visits, and, equally important, thorough education of the prospective mother in the proper care of herself during pregnancy and at the time of confinement.

For those who are unable to pay for proper medical and nursing supervision equally skilled service must be provided at reduced rates or given free.

Gastric and intestinal diseases are largely a matter of improper care, primarily in respect to feeding. Obviously, education of the mother is the most effective weapon against a high infant death rate from this group of diseases. Infant-welfare stations where well babies are kept well by means of periodical visits to the station for examination; instruction of the mother by a physician who is a specialist in infant care; public-health nurses who visit the homes to show the mother how to care for the infants, teach home modification of milk, and in other ways direct the mothers how to carry out the physician's orders—these are the important factors in a program for postnatal or "well baby" care.

For the sick babies of the families unable to afford private medical care there must be dispensaries or clinics presided over by specialists in the various infants' diseases. Visits to these clinics should be supplemented by the home-nursing visits, in order to insure execution of the physician's orders.

Many difficulties attend the carrying on of such work even after the plans have been perfected and the machinery for executing them

has been set in motion. For instance, the Lithuanians and Italians have adhered largely to their native language and customs, 75 per cent of the Italian mothers and 92 per cent of the Lithuanian being unable to speak English. Furthermore, 39 per cent of the foreign-born mothers were illiterate, 53 per cent of the Italians and 62 per cent of the Lithuanians being unable to read or write in any language. Their illiteracy and inability to speak English are great barriers to their instruction in matters of hygiene. Obviously, a great deal of personal work will be necessary if these mothers, who contribute the largest number of children to Waterbury and also the greatest number of prenatal and infant deaths, are to learn how to bear and rear normal children with the minimum of discomfort and injury to themselves.

Low earnings of the fathers were accompanied in Waterbury by a high infant mortality rate. Low earnings also had a close relationship with many of the factors which unite in causing undesirable living conditions. Poverty forces the family to live in the least desirable sections of the city, where lot congestion and room overcrowding are most frequent, and where the disrepair of the buildings is a constant menace to the health of the entire family. Waterbury had within its borders several definite plague spots, where almost every type of housing evil could be found, such as dilapidated one-family frame dwellings, ramshackle tenements in which overcrowding existed to a serious extent, alley houses, generally insanitary yards, with infrequent garbage and refuse collections. The problem of room congestion was complicated by the custom of keeping lodgers, nearly one-fourth of the mothers interviewed adding to the family income in this way.

At the time of the inquiry certain conditions generally associated with a high infant mortality rate did not exist in Waterbury, e. g., extensive employment of mothers outside the home, a large negro population, and a high per cent of illegitimacy.

Infant deaths in Waterbury are largely preventable, a fact which should encourage an immediate campaign to reduce the infant mortality rate to a minimum. Such a campaign should recognize two important principles of health work: (1) Specific preventive measures, such as the establishment of infant-welfare stations, will lessen and prevent infant illness as well as infant deaths; (2) general preventive measures such as those under the jurisdiction of the local health department will lessen and prevent sickness and deaths among all classes of the population. Public opinion must be educated to demand from all members of the community the cooperative action necessary for the eradication of the conditions which are responsible for the deaths of its youngest members.

APPENDIX A.

INFANT-WELFARE WORK, 1914-1916.

Since the close of the inquiry upon which this report is based the visiting nurses association has increased its work for infants, as shown in the following extracts from the reports of that organization for 1915 and 1916:

In September [1914] it was decided to divide the city into seven districts and let each nurse care for all the sick, adults or infants, in her district and as far as possible visit every baby born in it. The names and addresses of these babies are obtained from the birth-registration list at the city clerk's office. The mothers are visited and advised, and in many cases are given the excellent pamphlet, *The Baby*, furnished by the Metropolitan Life Insurance Co., printed in English, Italian, French, German, Polish, and Yiddish.

To make this work among babies more effective, milk stations in the more densely populated parts of the city are needed. The function of these stations is:

To advise mothers in regard to the care and feeding of infants.

To encourage breast feeding.

Where artificial feeding is necessary, to supply milk of good quality, at perhaps a lowered cost to persons unable to pay full market value.

By education in the preventive measures of child hygiene to prevent the diseases of infancy and childhood caused and influenced by errors in diet.

To serve as centers for all work relative to the welfare of infants.

Closely following along this line of postnatal work comes the need of prenatal work, which is the care and instruction of expectant mothers.

During the year 1916, 1,999 babies received care. In all, 6,994 visits were paid these babies.

The most important preventive work accomplished during this year was the opening of a baby-welfare station in June, 1916, in the heart of the Lithuanian section. Six physicians volunteered their services, so that there was a doctor at the station daily during the summer months. Later it was found necessary to have the doctors present on only two days each week.

Every baby brought to the station is weighed and given a thorough physical examination. The mother is instructed in proper feeding of the baby and if such feeding is artificial she buys pasteurized milk on sale at the station.

In regard to the work of this station the superintendent says in her report:

It is decidedly uphill work, as many superstitions and customs of the old country have to be overcome by persuasion and persistence, and it requires endless optimism

on the part of the nurse. Out of 282 babies brought to the station we had 27 deaths, but most of these deaths occurred among babies brought to us in a dying condition.

In connection with this work we are starting Little Mothers Leagues—classes where young girls, who often have the care of their younger brothers and sisters, are taught the care of babies, personal hygiene, and American standards of living. They, understanding English, take the information home to their parents, who are not always able to grasp what is taught them by the nurse on the subject of their babies. We also hope so to rouse the interest of these women that we can form mothers' classes.

The urgent need of more stations throughout the city can not be too strongly stated.

APPENDIX B.

SELECTED DISTRICTS IN INTENSIVE HOUSING STUDY.

District I.—Each district was so far as possible a unit in type of housing. District I was perhaps the most homogeneous. It consisted of French, Anne, and Gilbert Streets, which cross each other, forming a small, swastika-like knot wherein existed a type of housing distinct from that of the prosperous neighborhood by which it was surrounded. In this district the houses were small, old, dilapidated, and uniformly of frame construction. Of the 24 houses, 15 were two, and 9 were three stories high. Fourteen of the 24 were one or two family cottages and only two contained as many as six apartments. With the exception of three one-family cottages occupied by their owners, who kept them in fair condition, and one newer two-family cottage, all the houses, at the time the investigation was made, were in poor repair and several of them were in a state of utter dilapidation, some sagging as much as 6 inches along an entire side. In several instances both inside and outside stairways were so broken and worn as to be dangerous. The plaster on walls and ceilings was almost uniformly broken and dirty; floors were warped and sagging; the partition walls, ceilings, and floors were so thin and worn that in a number of cases water poured through the ceiling of the first floor apartment when the floor above was scrubbed, and in several cases the roofs leaked copiously in rainy weather.

In a very large number of cases the plumbing was seriously out of order, as the following instances illustrate: Eight toilets in the district did not flush at all when seen; one, the family reported, had not flushed for two months; in one house on Gilbert Street the toilet in the second-floor apartment leaked through the floor into the sink located just below; in another house on the same street the water leaked through from the second-floor sink to the sink below, and in this house, as in a number of others, the family upstairs was unable to get water when the family downstairs was using it—sometimes “not enough to get the meals” and often not enough to flush the toilet. In one house water from the sewer had backed up in the tubs to the depth of 3 or 4 inches.

The dilapidation of the houses made them a prey not only to dampness resulting from faulty plumbing but also to dampness from outside, due to their position on the hill. Along French and Gilbert

Streets the land slopes up gradually from West Main to the bend where French Street turns at right angles to itself and runs into Gilbert Street. Here, along the north side of French Street, the land rises abruptly in a hill against which the houses on this side of the street are built. Garbage and rubbish rolled down the side of the hill, collecting in a heap which partly buried the first-story windows. Water drained down the hill into the cellars and first-floor apartments, resulting in dampness throughout the house; in the cellars the dirt floors were damp even in the driest weather.

The streets reflected the disrepair of the houses. They were as narrow as alleys and along French Street and part of Gilbert and Anne there were no sidewalks, while the roadway was peppered with numerous holes which were transformed into pools in wet weather. In dry weather a thick deposit of dirt blew down the hill, carrying with it the rubbish which was so conspicuous in this entire section.

The district was largely Italian, having 32 Italian households, 3 native white, 4 native black, 7 Irish, 2 English, and 1 German family.¹

District II.—In District II (Railroad Hill) the Lithuanians, Italians, and Irish predominated, the Lithuanians with 46 families forming 36.5 per cent of the total households, the Italians and Irish with 36 and 33 families, respectively, contributing 28.6 and 26.2 per cent. In addition to these there were 7 native white, 2 German, and 2 Polish families. The Irish were the earliest inhabitants of the neighborhood and had drifted to the lower or south end of the hill, where they lived in one and two family cottages generally owned by the occupants and kept in much better condition than most of the houses farther north which were rented to Italians and Lithuanians.

The houses were of much the same character as those in District I—frame, small, old, and in poor repair. Fifty-one out of the total 56 were one or two stories high, and 38 or 67.9 per cent contained one or two apartments, while only two had as many as six apartments. Aside from 11 cottages owned by Irish families as already described, the houses were in as poor repair as those in District I, with broken stairways and plaster, leaking roofs, and faulty plumbing. In one cottage where a widow with four children lived rent free because the landlord “would only have to pull the place down” if she moved out, every step in the stairway was broken. Roofs, floors, and ceilings were mildewed and sagging, threatening instant collapse. In another dilapidated two-room hut the door was entirely gone and a curtain screen had been put up as a makeshift.

Railroad Hill is a long, narrow, slightly winding ridge running north and south between the Naugatuck River on the east and the New York, New Haven & Hartford Railroad tracks on the lower land to the west. The city sewer is laid along the hill for about

¹ General Table 43.

one-quarter of its length from the north, and beyond that is carried along the Naugatuck Valley beside the hill. The sinks and water-closets in most of the houses at the northern end of the hill drained into this city sewer; but the greater number on the hill were not connected with the sewer, and the waste pipes from the sinks poured the soapy, greasy water into the yard. Here it was sometimes dispersed over the surface, sinking into the ground and making the entire yard damp and muddy, and sometimes was carried in a stream down the hill into the garden or to the swampy land by the river. This situation was the more serious since there were in this district six basement dwellings, one-half of the number found in all the districts canvassed. It was particularly objectionable in such cases as that of the small hut without a door, already described. This was on lower land than the large tenement next door, the drainage from which poured down into the lower yard, making it impossible at times for the occupants of the small cottage to reach their toilet in the yard without wading in sewage to their ankles.

The worst feature of the lack of sewer connections is the yard dry privies. During the summer months these privies became especially offensive; the stench often being strong enough to reach a person walking along the street. Only 2 of the privies were in what could be termed fair condition, moderately clean and with comparatively little odor; 6 were filthy and 17 others were in need of immediate cleaning. In 13 instances the compartments had broken through behind and the contents were overflowing down the hillsides. In one particularly offensive case, where 6 families including 32 persons used the same privy vault, the overflow had formed an open pool, which served as both breeding and feeding place for countless flies which covered its surface. One privy was so bad that two families had moved away one after the other and the family which remained used the bushes rather than go near the toilet. On the west side of the hill these toilets drained into the vegetable gardens of the Italian families and on the east side into the river, which is very shallow at this point and used by the children for wading in summer. The hill at its southern end is somewhat farther from the stream, and into the intervening swampy land privies and waste pipes drained. The water stood here in stagnant, evil-smelling pools. An attempt to find out how often the privies were emptied or cleaned was fruitless, as only two families could remember a time when they were emptied. To add to the discomfort the compartments were generally out of repair and two of the seats were so broken as to prohibit their use.

District III.—Like District I, District III showed a similar small, old, dilapidated cottage type of house. District III, including Brown Street and North Elm Street between Water and Cherry, while still

having a fair proportion of houses of this type, is being gradually invaded by the larger brick tenement. In this district 17 out of 31 houses were two stories high, 2 were four stories, and 1 five. Seventeen houses were one or two family cottages while 2 contained five apartments, 4 contained six, 1 eight, 1 twelve, and 1 thirteen.

Italians and Jews predominated in this district, forming 33.6 per cent and 29.9 per cent, respectively, of the total 107 households. Polish followed with 17 families, and native white with 10, while Russian, Lithuanian, German, and Irish totaled 12 families.

Six of the houses in this district were found to be in good or fair condition, others being in various degrees of disrepair. Here were the same dirty, broken plaster, warped floors, splintered woodwork, and steep, narrow, broken stairways as in Districts I and II, and in some instances the entrance steps were entirely destroyed. Thirteen houses were noted as particularly damp; in one of these the mother reported that water from the street drained into the cellar where the toilet was located, making it impossible to keep it in a sanitary condition.

In one building the tenants reported three cases of tuberculosis, one of pneumonia, and one of bronchial asthma, and an 8-months-old baby in one family was in the hospital with pneumonia at the time the house was visited. In an apartment on the third floor was a 9-year-old boy with incipient tuberculosis and a 17-year-old girl said to be dying of bronchial asthma. In an adjoining apartment on the same floor a baby had recently died from tuberculosis; the husband of the baby's older sister, living in the same apartment of three rooms, was in an advanced stage of tuberculosis and he and his wife slept in one of the small bedrooms. The remainder of the baby's family, father, mother, and two children, fearing infection, were crowded into the remaining bedroom, containing only 880 cubic feet of air space, although the legal minimum requirement for the four persons was 1,600 cubic feet. This building was new, being only three or four years old, of brick, and in fair repair. It was five stories high, contained 13 families, and seemed fairly well planned as to light and ventilation. The toilet of every apartment in the building opened upon the same shaft, making every family afraid to open the window in the toilet for "fear" of contagion from the next apartment.

District IV.—While the large tenement type of dwelling was present in only three cases in District III it was the rule in District IV, which included Bank Street, beginning just south of the lodging-house, stag-hotel, and business-house belt, reaching half a block south of Grand Street, south the length of Bank Street, across the river to Washington Avenue. Below this the character of the houses changed from the large brick tenement to smaller frame houses in fairly good con-

dition, with the exception of two large brick buildings on the corner of Bank and Porter Streets, a block farther south, which were included in the study because they were in accordance with the Bank Street type.

District IV was the largest district canvassed, having a population of 1,917¹ persons of whom 773 or 40.3 per cent were adult members of the families, 592 or 30.9 per cent adult lodgers, 522 or 27.2 per cent children under 12, and 30 for whom no information was secured, proportions corresponding closely to those of the total population of the six districts combined. Italians and Lithuanians predominated in District IV, the Italians having 148 or 52.5 per cent of the total number of households and the Lithuanians, who concentrated in a colony south of the river, having 115 or 40.8 per cent. All other nationalities, native white, Irish, French Canadian, Jewish, English, and Swedish combined, totaled 18 families or 6.4 per cent of the entire number.

Bank Street is essentially a business street. It is lined with brick buildings containing dwellings above the stores. Twenty-one of the houses included in this district were two stories, 21 three stories, and 20 were four stories in height. Twenty-one houses contained one or two apartments, 25 had five or more, and 9 had ten or more, 1 having seventeen apartments and 1 eighteen. The special housing defect of this district was the large proportion of gloomy and poorly ventilated rooms. This condition inevitably accompanies this prevalence of large block tenements built with a very narrow passage between buildings or none at all. The defect is purely structural and is to be found irrespective of the state of repair. Indeed, on Bank Street a number of tenement houses maintained in fair condition contained bedrooms having no windows whatsoever or windows opening only into other rooms or hallways. When combined with bad sanitation and dilapidation this type of building introduces the worst possible housing conditions.

Many such buildings were found in the small section of Bank Street known as Wards Flats, just north of the river and just south of the Bank Street factory belt. Here were four buildings, one of 8 tenements, one of 14, and one of 17, and one a rear 5-family house. In these four buildings lived 230 people. The buildings were very old and dilapidated, with dank, clammy, filthy walls, dark, narrow halls and stairways, and broken woodwork. Plaster was breaking off the walls and ceilings in great pieces. The head of one household said that the pipes had been so rusted and corroded that no water would run, and he had finally secured new pipes at his own expense. The waste pipes from the 17-family tenement drained into the river

¹ General Table 44.

which flows along its side. A number of the toilets were in the last stages of disrepair. One closet was leaking so badly that water stood from two to three inches deep on the floor and one could not enter the compartment. One toilet, used by 2 families including 14 persons, had not flushed for four days and was full of refuse. Another, badly corroded, flushing inadequately, leaking all over the floor, and fitted with an old broken board for a seat, was built under the stairway, where it was impossible to stand upright. Another ill-smelling toilet with seat and floor broken had been patched by the tenant. The bowl was corroded and it had no chain or any flushing apparatus left, but was the only accommodation for 2 families, including 20 persons. In one apartment a toilet, corroded and flushing inadequately, was not even placed in a separate compartment, but was located in the hallway, shut off from the rest of the apartment by only a curtain stretched in front of it. In the four buildings just described 15 bedrooms had no windows at all or windows opening only into other inadequately ventilated rooms, while 11 had small dark glass windows opening on a covered shaft closed to the outside air.

Another flagrant example of uncontrolled housing, diverging from the Bank Street tenement type but compatible with the character of the neighborhood as a business center, was the old frame hotel on the corner of Bank and Meadow Streets, converted into a tenement house.¹ This was visited a number of times through a period of five months. At the time of the first visit only 3 families lived here; later it was occupied by 6 families, but at no time was the house fully occupied. The occupied apartments were unfit for habitation. They had sagging ceilings, broken, filthy plaster and woodwork, and were fitted with thin partitions and faulty, makeshift plumbing. It was, however, the condition of the unoccupied apartments and of the toilets which constituted the greatest menace to health. Only two toilets were found which flushed at all and they did not flush adequately. At the end of each of the two wings on the second floor were toilets not flushing and choked to the top of the bowl. These and the unoccupied rooms were unlocked and open to the promiscuous use of any tramp or passer-by. As a result the floors of the rooms were vile with refuse of months' accumulation. Before the end of the investigation much of the filth had been cleaned out of these rooms and many of the doors painted and fastened, but at no time during the 5 months of the investigation in the city were the toilets described either properly cleaned or put in repair.

One of the babies scheduled in the infant mortality investigation lived in this house and, because his mother went out to work, was left all day to play about in these unoccupied rooms in the care of two

¹ This building has since been razed.

little girls, 8 and 5 years of age. Not only the menace to health of this insanitary condition should be emphasized, but the social danger of giving any vagrant free access to those empty rooms where little girls played unprotected, should be recognized.

District V.—District V, which adjoins the northern part of the Bank Street district, extended between Bank, South Main, and Grand Streets and included Canal, Chatfield, two short alleyways known as Rear South Main, and the portion of Meadow Street lying between Bank and South Main. Italians, with 156 families, constituted 97.5 per cent of the total number. There were but 4 other families, 1 Irish, 1 Jewish, and 2 native black. This district was second in size, with a population of 1,268 persons. Of these, 484 or 38.2 per cent were adult lodgers and 357 or 28.2 per cent children under 12 years of age.

In this district, containing both the small frame cottage and the larger brick tenement typical of the greater part of Bank Street, were found the bad features common to both types of buildings. The large brick tenement on Bank Street, especially in the more prosperous portion of the Lithuanian colony south of the river, was sometimes in good repair. In District V it was uniformly old and in very bad repair. In this district also one building was reported which contained 19 apartments and was a modified dumb-bell type. In this four-story building there were 6 apartments on each floor except the first, which had 2 apartments behind the store; and the second, where 2 apartments had been combined to make 1 large apartment for the owner. There were 2 bedrooms on each floor which had no windows whatsoever, but which ventilated over a partition into another bedroom which in turn opened upon a narrow lot line court. Four hall toilets on each floor opened on narrow inadequate shafts and were very offensive.

District VI.—Close to District V is Rushton Place, designated District VI, which is very small but contained several interesting features. Here were 7 Polish families, 7 French Canadian, 4 native white, and 1 Irish.

Rushton Place is entered from South Main Street by an alleyway just south of Meadow Street. In the center of the place was a large oblong plot of vacant land circled by a narrow dirt road. At one end was a 2-family frame cottage, at the other an 8-family tenement, also frame and almost empty. Facing on the plot along the south side was a long, low, frame, 16-family tenement. The houses were built by the same man, on the same plan, and were old and in very bad repair. The 2-family cottage was in better condition than the other houses and had two toilets inside the house. The 8-family house had two yard closets at each end of the building, one not flushing at all and the other in poor condition. For the 16-family house were four yard closets in a shed with four compartments. These were used

promiscuously by all the occupants of the building amounting, at the time of inspection, when two apartments were empty, to over 100 persons. The toilets were foul. One of the closets did not flush at all and the accumulated filth had overflowed upon the floor. Flushing in the other three closets was insufficient to carry away the contents of the bowls and all were leaking so that none of the compartments could be entered without wetting the feet. These closets in this filthy condition were located just behind the building and only a few feet from the doorsteps where the children played and the family gathered on summer evenings.

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GENERAL TABLES.

TABLE 1.—All known issues^a during selected year, infant deaths, infant mortality rate, and per cent of stillbirths and miscarriages, according to nationality of mother and registration status of birth.

Registration status of birth and nationality of mother.	Total issues.	Live births.	Infant deaths.	Infant mortality rate. ^b	Stillbirths and miscarriages. ^c	
					Num-ber.	Per cent of total issues. ^b
Registered and unregistered.....	2,654	2,568	311	121.1	86	3.2
Nativity of mother not reported.....	92	90	3	.....	2	.....
Native mothers.....	882	855	84	98.2	27	3.1
Foreign-born mothers.....	1,680	1,623	224	138.0	57	3.4
Italian.....	723	697	78	111.9	26	3.6
Lithuanian.....	282	273	56	205.1	9	3.2
Irish.....	216	209	38	181.8	7	3.2
All other.....	411	399	47	117.8	12	2.9
Not reported.....	48	45	5	.....	3	.....
Registered.....	2,323	2,239	259	115.7	84	3.6
Nativity of mother not reported.....	6	4	.....	.....	2	.....
Native mothers.....	860	834	79	94.7	26	3.0
Foreign-born mothers.....	1,457	1,401	180	128.5	56	3.8
Italian.....	700	675	71	105.2	25	3.6
Lithuanian.....	111	102	26	254.9	9	8.1
Irish.....	210	203	37	182.3	7	3.3
All other.....	393	381	46	120.7	12	3.1
Not reported.....	43	40	.....	.....	3	.....
Unregistered.....	331	329	52	158.1	2	.6
Nativity of mother not reported.....	86	86	3	.....	.....	.....
Native mothers.....	22	21	5	.....	1	.....
Foreign-born mothers.....	223	222	44	198.2	1	.4
Italian.....	23	22	7	.....	1	.....
Lithuanian.....	171	171	30	175.4	.....	.....
Irish.....	6	6	1	.....	.....	.....
All other.....	18	18	1	.....	.....	.....
Not reported.....	5	5	5	.....	.....	.....

^a 120 additional records were secured of infants said to have been born in Waterbury during the selected year. 69 of the 120 proved to be of infants not born during the year and 51 of infants born outside of Waterbury.

^b Not shown where base is less than 100.

^c Detailed study confined to live births and to stillbirths that had resulted from 7 or more months' gestation.

TABLE 2.—*Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, according to nationality of mother.*

Nationality of mother.	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^a	Stillbirths.	
					Num-ber.	Per cent of total births. ^a
All mothers.....	2, 197	2, 144	263	122. 7	53	2. 4
Native mothers.....	718	705	69	97. 9	13	1. 8
Foreign-born mothers.....	1, 479	1, 439	194	134. 8	40	2. 7
Italian.....	651	628	69	109. 9	23	3. 5
Lithuanian.....	267	260	54	207. 7	7	2. 6
Irish.....	200	195	36	184. 6	5	2. 5
Slavic ^b	91	89	11	.....	2	.....
Jewish.....	61	60	3	.....	1	.....
German.....	58	57	5	.....	1	.....
French Canadian.....	56	56	3	.....	.....	.....
English, Scotch, and Welsh ^c	40	40	8	.....	.....	.....
All other ^d	55	54	5	.....	1	.....

^a Not shown where base is less than 100.^b Including 65 Polish, 20 Russian, 2 Slovak, 2 Bohemian, 1 Serbo-Croatian, and 1 Ruthenian.^c Including 18 English, 21 Scotch, and 1 Welsh.^d Including 29 Scandinavian, 7 English Canadian, 6 French, 5 Magyar, 3 Syrian, 2 Greek, 1 Dutch, 1 Spanish, and 1 West Indian Black.TABLE 3.—*Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, by ward of residence.*

Ward of residence.	Total births.	Live births.	Infant deaths.	Infant mortality rate.	Stillbirths.	
					Num-ber.	Per cent of total births.
The city.....	2, 197	2, 144	263	122. 7	53	2. 4
Ward:						
1.....	460	451	63	139. 7	9	2. 0
2.....	336	326	23	70. 6	10	3. 0
3.....	493	482	51	105. 8	11	2. 2
4.....	585	573	86	150. 1	12	2. 1
5.....	323	312	40	128. 2	11	3. 4

TABLE 4.—*Births during selected year, according to nationality of mother and nativity of father.*

Nationality of mother and nativity of father.	Births during selected year.
All mothers.....	2,197
Mother's nationality same as father's.....	1,911
Both native.....	556
Both of same foreign nationality.....	1,355
Mother's nationality different from father's.....	284
One parent native, other foreign.....	254
Mother native, father foreign.....	160
Mother foreign, father native.....	94
Mother's nationality:	
Irish.....	31
English, Scotch, and Welsh.....	16
French Canadian.....	16
German.....	12
Jewish.....	2
Italian.....	1
Lithuanian.....	1
All other.....	15
Parents of different foreign nationalities.....	30
Mother's nationality:	
English, Scotch, and Welsh.....	8
German.....	7
Irish.....	7
French Canadian.....	1
All other.....	7
Mother native, father's nationality not reported.....	2

TABLE 5.—Number and per cent distribution of deaths among infants born in Waterbury during selected year and of infant deaths in the registration area in 1914, by cause of death.

Abridged International List No. ^a	Detailed International List No. ^a	Cause of death. ^b	Infant deaths in—			
			Waterbury.		Registration area.	
			Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.
		All causes.....	263	100.0	155,075	100.0
24.....	102,103.....	Gastric and intestinal diseases ^c ...	88	33.5	37,736	24.3
25.....	104.....	Diseases of the stomach.....	4	1.5	2,556	1.6
		Diarrhea and enteritis.....	84	31.9	35,180	22.7
20.....	89.....	Respiratory diseases ^d	39	14.8	24,036	15.5
Part of 23.....	91.....	Acute bronchitis.....	8	3.0	3,458	2.2
22.....	92.....	Broncho-pneumonia.....	23	8.7	13,653	8.8
Part of 33.....	150.....	Pneumonia.....	8	3.0	6,925	4.5
		Malformations.....	10	3.8	9,663	6.2
Part of 33.....	151(1).....	Early infancy.....	83	31.6	52,535	33.9
Part of 33.....	151(2), 152(2), 153.....	Premature birth.....	34	12.9	28,270	18.2
Part of 37.....		Congenital debility.....	36	13.7	18,549	12.0
Part of 37.....	152(1).....	Injuries at birth.....	13	4.9	5,716	3.7
5.....	6.....	Epidemic diseases ^e	18	6.8	12,714	8.2
6.....	7.....	Measles.....	1	.4	1,041	.7
7.....	8.....	Scarlet fever.....	.....	.....	204	.1
8.....	9.....	Whooping cough.....	4	1.5	3,899	2.5
9.....	10.....	Diphtheria and croup.....	1	.4	977	.6
Part of 12.....	14.....	Influenza.....	2	.8	481	.3
Part of 12.....	18.....	Dysentery.....	.....	.....	573	.4
Part of 37.....	24.....	Erysipelas.....	2	.8	740	.5
13.....	28, 29.....	Tetanus.....	.....	.....	368	.2
14.....	30.....	Tuberculosis of the lungs.....	1	.4	883	.6
15.....	31, 32, 33, 34, 35.....	Tuberculous meningitis.....	4	1.5	1,118	.7
Part of 37.....	37.....	Other forms of tuberculosis.....	.....	.....	448	.3
35.....	155 to 186.....	Syphilis.....	3	1.1	1,982	1.3
38.....	187, 188, 189.....	External causes.....	1	.4	1,926	1.2
		Diseases ill defined or unknown... ^b	4	1.5	2,964	1.9
17.....	61.....	All other causes.....	20	7.6	13,501	8.7
Part of 37.....	71.....	Meningitis.....	3	1.1	1,659	1.1
19.....	79.....	Convulsions.....	5	1.9	2,950	1.9
		Organic diseases of the heart.....	.....	.....	596	.4
		Other.....	12	4.6	8,296	5.3

^a The numbers indicate the classification in the abridged and the detailed lists, respectively, of the Manual of the International List of Causes of Death.

^b The causes of death included in this list are those used by the United States Bureau of the Census (see Mortality Statistics, 1914, p. 660) in classifying the deaths of infants under 1 year. They are those causes of death or groups of causes which are most important at this age. The numbers of the detailed and abridged International Lists will facilitate their identification. In order to make discussion of the figures easier, these causes of death have been grouped in 8 main groups.

^c The term "gastric and intestinal diseases" as used in the tables and discussion includes, as above shown, only the diseases of this type which are most important among infants, i. e., diseases of the stomach, diarrhea, and enteritis. It does not include all "diseases of the digestive system" as classified under this heading according to the detailed International List.

^d "Respiratory diseases" as used in the tables and discussion similarly includes only those of the respiratory diseases which are most important among infants, i. e., acute bronchitis, broncho-pneumonia, and pneumonia. It does not include all "diseases of the respiratory system" as classified under this heading according to the detailed International List.

^e "Epidemic diseases" as used in the tables and discussion includes only those of this group which are most important among infants.

TABLE 6.—Number and per cent distribution of deaths among infants born during selected year to mothers of specified nativity, and infant mortality rates, by cause of death.

Cause of death.	Deaths among infants born during selected year to—								
	All mothers.			Native mothers.			Foreign-born mothers.		
	Num-ber.	Infant mor-tality rate.	Per cent distri-bution.	Num-ber.	Infant mor-tality rate.	Per cent distri-bution.	Num-ber.	Infant mor-tality rate.	Per cent distri-bution.
All causes.....	263	122.7	100.0	69	97.9	100.0	194	134.8	100.0
Gastric and intestinal diseases.....	88	41.0	33.5	18	25.5	26.1	70	48.6	36.1
Respiratory diseases.....	39	18.2	14.8	10	14.2	14.5	29	20.2	14.9
Malformations.....	10	4.7	3.8	4	5.7	5.8	6	4.2	3.1
Early infancy.....	83	38.7	31.6	23	32.6	33.3	60	41.7	30.9
Premature birth.....	34	15.9	12.9	11	15.6	15.9	23	16.0	11.9
Congenital debility.....	36	16.8	13.7	7	9.9	10.1	29	20.2	14.9
Injuries at birth.....	13	6.1	4.9	5	7.1	7.2	8	5.6	4.1
Epidemic diseases.....	18	8.4	6.8	7	9.9	10.1	11	7.6	5.7
External causes.....	1	.5	.4	—	—	—	1	.7	.5
Diseases ill defined or unknown.....	4	1.9	1.5	1	1.4	1.4	3	2.1	1.5
All other causes.....	20	9.3	7.6	6	8.5	8.7	14	9.7	7.2

TABLE 7.—Deaths among infants born during selected year occurring in specified calendar month, by cause of death.

Cause of death.	Deaths among infants born during selected year.												
	Total.	Occurring in specified calendar month.											
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
All causes.....	263	24	20	22	22	22	15	25	28	44	15	19	16
Gastric and intestinal diseases.....	88	2	2	2	3	4	8	12	18	26	7	3	1
Respiratory diseases.....	39	7	5	6	5	6	1	—	2	2	2	1	2
Malformations.....	10	1	—	1	1	1	1	1	2	1	—	—	1
Early infancy.....	83	8	6	8	5	9	4	8	3	14	5	5	8
Premature birth.....	34	4	2	5	4	3	—	1	2	7	3	1	2
Congenital debility.....	36	3	3	2	1	3	2	6	—	7	2	3	4
Injuries at birth.....	13	1	1	1	—	3	2	1	1	—	—	1	2
Epidemic diseases.....	18	5	1	2	4	1	—	2	2	—	1	—	—
External causes.....	1	—	1	—	—	—	—	—	—	—	—	—	—
Diseases ill defined or unknown.....	4	—	—	—	—	1	1	1	—	1	—	—	—
All other causes.....	20	1	5	3	4	—	—	1	1	—	—	1	4

TABLE 8.—Deaths among infants born during selected year occurring in specified month of life, by cause of death.

Cause of death.	Total deaths.	Deaths in specified month of life.													
		First.			Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth.
		Total.	Under 2 weeks.	2 weeks but under 1 month.											
All causes	263	107	88	19	28	18	16	16	19	7	13	13	13	4	9
Gastric and intestinal diseases.....	88	14	8	6	11	10	9	8	8	3	5	8	7	2	3
Respiratory diseases.....	39	7	2	5	4	1	4	3	5	2	5	3	3	1	1
Malformations.....	10	6	6	.....	.....	1	.....	.....	1	.....	.....	.....	2	.....	.....
Early infancy.....	83	69	64	5	6	2	1	1	2	1	.....	.....	.....	.....	1
Premature birth.....	34	34	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Congenital debility.....	36	23	18	5	5	2	1	1	2	1	.....	.....	.....	.....	1
Injuries at birth.....	13	12	12	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Epidemic diseases.....	18	3	1	2	3	2	1	2	2	.....	2	.....	1	1	1
External causes.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diseases ill defined or unknown.....	4	.....	.....	.....	2	1	.....	.....	1	.....	.....	.....	.....	.....	.....
All other causes.....	20	7	6	1	2	1	1	2	.....	1	1	2	.....	.....	3

TABLE 9.—Births from all pregnancies, infant deaths, infant mortality rate, and per cent of stillbirths, according to order of pregnancy and age of mother.

Order of pregnancy and age of mother.	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^a	Stillbirths.	
					Num-ber.	Per cent of total births. ^a
All pregnancies, all ages.....	7,772	7,507	987	131.5	265	3.4
Under 20.....	539	518	92	177.6	21	3.9
20 to 24.....	2,458	2,368	300	126.7	90	3.7
25 to 29.....	2,526	2,451	297	121.2	75	3.0
30 to 34.....	1,466	1,418	184	129.8	48	3.3
35 to 39.....	641	613	87	141.9	28	4.4
40 and over.....	133	131	21	160.3	2	1.5
Not reported.....	9	8	6	.....	1	.....
First pregnancy, all ages.....	2,073	1,994	243	121.9	79	3.8
Under 20.....	403	388	65	167.5	15	3.7
20 to 24.....	1,024	1,034	121	117.0	50	4.6
25 to 29.....	459	446	37	83.0	13	2.8
30 to 34.....	106	105	16	152.4	1	.9
35 to 39.....	18	18	3	.....	.....	.....
40 and over.....	1	1	1	.....	.....	.....
Not reported.....	2	2	.....	.....	.....	.....
Second pregnancy, all ages.....	1,595	1,547	174	112.5	48	3.0
Under 20.....	112	106	20	188.7	6	5.4
20 to 24.....	736	718	83	115.6	18	2.4
25 to 29.....	549	531	53	99.8	18	3.3
30 to 34.....	157	152	16	105.3	5	3.2
35 to 39.....	37	37	1	.....	.....	.....
40 and over.....	2	2	.....	.....	.....	.....
Not reported.....	2	1	1	.....	1	.....

^a Not shown where base is less than 100.

TABLE 9.—*Births from all pregnancies, infant deaths, infant mortality rate, and per cent of stillbirths, according to order of pregnancy and age of mother—Continued.*

Order of pregnancy and age of mother.	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^a	Stillbirths.	
					Num-ber.	Per cent of total births. ^a
Third pregnancy, all ages.	1,215	1,171	151	128.9	44	3.6
Under 20.	23	23	7	.....	.....	.....
20 to 24.	397	382	57	149.2	15	3.8
25 to 29.	552	536	61	113.8	16	2.9
30 to 34.	191	180	18	100.0	11	5.8
35 to 39.	45	43	5	.....	2	.....
40 and over.	6	6	2	.....	.....	.....
Not reported.	1	1	1	.....	.....	.....
Fourth pregnancy, all ages.	893	870	109	125.3	23	2.6
Under 20.	1	1	.....	.....	.....	.....
20 to 24.	173	170	27	158.8	3	1.7
25 to 29.	418	407	49	120.4	11	2.6
30 to 34.	232	227	22	96.9	5	2.2
35 to 39.	63	59	10	.....	4	.....
40 and over.	5	5	.....	.....	.....	.....
Not reported.	1	1	1	.....	.....	.....
Fifth pregnancy, all ages.	646	625	98	156.8	21	3.3
20 to 24.	48	44	9	.....	4	.....
25 to 29.	295	288	41	142.4	7	2.4
30 to 34.	226	219	37	168.9	7	3.1
35 to 39.	68	65	8	.....	3	.....
40 and over.	8	8	2	.....	.....	.....
Not reported.	1	1	1	.....	.....	.....
Sixth pregnancy, all ages.	443	426	72	169.0	17	3.8
20 to 24.	17	17	2	.....	.....	.....
25 to 29.	147	141	30	212.8	6	4.1
30 to 34.	199	192	24	125.0	7	3.5
35 to 39.	73	70	15	.....	3	.....
40 and over.	6	5	.....	.....	1	.....
Not reported.	1	1	1	.....	.....	.....
Seventh pregnancy, all ages.	331	316	46	145.6	15	4.5
20 to 24.	2	2	1	.....	.....	.....
25 to 29.	69	66	14	.....	3	.....
30 to 34.	156	150	24	160.0	6	3.8
35 to 39.	90	84	4	.....	6	.....
40 and over.	13	13	2	.....	.....	.....
Not reported.	1	1	1	.....	.....	.....
Eighth pregnancy, all ages.	218	211	33	156.4	7	3.2
20 to 24.	1	1	.....	.....	.....	.....
25 to 29.	23	22	6	.....	1	.....
30 to 34.	101	98	13	.....	3	3.0
35 to 39.	74	72	10	.....	2	.....
40 and over.	19	18	4	.....	1	.....
Ninth pregnancy, all ages.	147	142	28	197.2	5	3.4
25 to 29.	7	7	4	.....	.....	.....
30 to 34.	60	58	10	.....	2	.....
35 to 39.	66	63	11	.....	3	.....
40 and over.	14	14	3	.....	.....	.....
Tenth pregnancy, all ages.	97	93	14	.....	4	.....
25 to 29.	6	6	2	.....	.....	.....
30 to 34.	26	25	2	.....	1	.....
35 to 39.	49	46	8	.....	3	.....
40 and over.	16	16	2	.....	.....	.....
Eleventh pregnancy, all ages.	49	47	4	.....	2	.....
25 to 29.	1	1	.....	.....	.....	.....
30 to 34.	8	8	1	.....	.....	.....
35 to 39.	28	26	3	.....	2	.....
40 and over.	12	12	.....	.....	.....	.....

^a Not shown where base is less than 100.

TABLE 9.—Births from all pregnancies, infant deaths, infant mortality rate, and per cent of stillbirths, according to order of pregnancy and age of mother—Continued.

Order of pregnancy and age of mother.	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^a	Stillbirths.	
					Num-ber.	Per cent of total births. ^a
Twelfth pregnancy, all ages.....	27	27	6	.....	.....	.....
30 to 34.....	2	2	1	.....	.....	.....
35 to 39.....	12	12	3	.....	.....	.....
40 and over.....	13	13	2	.....	.....	.....
Thirteenth pregnancy, all ages.....	14	14	3	.....	.....	.....
30 to 34.....	1	1	.....	.....	.....	.....
35 to 39.....	8	8	2	.....	.....	.....
40 and over.....	5	5	1	.....	.....	.....
Fourteenth pregnancy, all ages.....	10	10	1	.....	.....	.....
30 to 34.....	1	1	.....	.....	.....	.....
35 to 39.....	4	4	1	.....	.....	.....
40 and over.....	5	5	.....	.....	.....	.....
Fifteenth pregnancy, all ages.....	6	6	.....	.....	.....	.....
35 to 39.....	2	2	.....	.....	.....	.....
40 and over.....	4	4	.....	.....	.....	.....
Sixteenth pregnancy, all ages.....	3	3	2	.....	.....	.....
35 to 39.....	2	2	2	.....	.....	.....
40 and over.....	1	1	.....	.....	.....	.....
Seventeenth pregnancy, all ages.....	2	2	1	.....	.....	.....
35 to 39.....	2	2	1	.....	.....	.....
Eighteenth pregnancy, all ages.....	2	2	1	.....	.....	.....
40 and over.....	2	2	1	.....	.....	.....
Nineteenth pregnancy, all ages.....	1	1	1	.....	.....	.....
40 and over.....	1	1	1	.....	.....	.....

^a Not shown where base is less than 100.

TABLE 10.—*Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, according to age of mother at birth of child and nativity.*

Age of mother at birth of child and nativity.	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^a	Stillbirths.	
					Num-ber.	Per cent of total births. ^a
All mothers.....	2,197	2,144	263	122.7	53	2.4
Under 20.....	96	95	12	.....	1	.....
20 to 24.....	546	534	53	99.3	12	2.2
25 to 29.....	658	643	78	121.3	15	2.3
30 to 34.....	479	463	56	121.0	16	3.3
35 to 39.....	312	304	44	144.7	8	2.6
40 and over.....	105	104	20	192.3	1	1.0
Not reported.....	1	1	.....	.....	.....	.....
Native mothers.....	718	705	69	97.9	13	1.8
Under 20.....	53	53	6	.....	.....	.....
20 to 24.....	201	199	13	65.3	2	1.0
25 to 29.....	208	203	27	133.0	5	2.4
30 to 34.....	132	131	13	99.2	1	.8
35 to 39.....	95	91	6	.....	4	.....
40 and over.....	29	28	4	.....	1	.....
Foreign-born mothers.....	1,479	1,439	194	134.8	40	2.7
Under 20.....	43	42	6	.....	1	.....
20 to 24.....	345	335	40	119.4	10	2.9
25 to 29.....	450	440	51	115.9	10	2.2
30 to 34.....	347	332	43	129.5	15	4.3
35 to 39.....	217	213	38	178.4	4	1.8
40 and over.....	76	76	16	.....	.....	.....
Not reported.....	1	1	.....	.....	.....	.....

^a Not shown where base is less than 100

TABLE 11.—Mothers reporting specified number of stillbirths, all pregnancies, by number of births and nativity.^a

Births to mother and nativity of mother.		Number of mothers.							
		Total.	Reporting specified number of stillbirths.						
			None.	1	2	3	4	6	9
All mothers.....		2,155	1,971	137	31	10	3	1	2
Births:									
1.....		489	480	9					
2.....		428	413	11	4				
3.....		335	309	23	2	1			
4.....		270	234	24	10	2			
5.....		206	181	19	5	1			
6.....		132	113	15	2	1	1		
7.....		100	85	9	3	2		1	
8.....		76	59	13	2	2			
9.....		47	41	3	1	1	1		
10.....		38	32	6					
11.....		14	10	2	1		1		
12.....		14	10	2	1				1
13.....		3	2						1
14.....		1	1						
16.....		1	1						
18.....		1		1					
Native mothers.....		704	666	28	7	1	2		
Births:									
1.....		223	220	3					
2.....		179	175	2	2				
3.....		112	108	3	1				
4.....		65	54	8	2	1			
5.....		38	35	1	2				
6.....		31	27	3			1		
7.....		15	13	2					
8.....		18	13	5					
9.....		11	11						
10.....		8	7	1					
11.....		2	1				1		
12.....		2	2						
Foreign-born mothers.....		1,451	1,305	109	24	9	1	1	2
Births:									
1.....		266	260	6					
2.....		249	238	9	2				
3.....		223	201	20	1	1			
4.....		205	180	16	8	1			
5.....		168	146	18	3	1			
6.....		101	86	12	2	1			
7.....		85	72	7	3	2		1	
8.....		58	46	8	2	2			
9.....		36	30	3	1	1	1		
10.....		30	25	5					
11.....		12	9	2	1				
12.....		12	8	2	1				1
13.....		3	2						1
14.....		1	1						
16.....		1	1						
18.....		1		1					

^a Excluding miscarriages.

TABLE 12.—*Mothers reporting specified number of miscarriages, all pregnancies, by number of pregnancies and nativity.*

Pregnancies ^a to mother and nativity of mother.	Number of mothers.							
	Total.	Reporting specified number of miscarriages.						
		None.	1	2	3	4	5	8
All mothers.....	2,155	1,792	235	77	34	12	4	1
Pregnancies:								
1.....	466	466	.....	.....	.....	.....	.....	.....
2.....	410	381	29	.....	.....	.....	.....	.....
3.....	331	288	40	3	.....	.....	.....	.....
4.....	256	208	39	8	1	.....	.....	.....
5.....	207	162	32	10	3	.....	.....	.....
6.....	126	88	24	11	3	.....	.....	.....
7.....	119	74	21	16	8	.....	.....	.....
8.....	78	54	11	7	3	3	.....	.....
9.....	57	28	10	10	5	4	.....	.....
10.....	50	26	13	6	2	2	1	.....
11.....	25	7	10	3	3	1	.....	1
12.....	15	8	3	1	2	1	.....	.....
13.....	5	.....	2	1	.....	.....	2	.....
14.....	3	.....	1	1	1	.....	.....	.....
15.....	3	.....	.....	.....	3	.....	.....	.....
16.....	2	1	.....	.....	.....	1	.....	.....
18.....	1	1	.....	.....	.....	.....	.....	.....
19.....	1	.....	.....	.....	.....	.....	1	.....
Native mothers.....	704	602	73	22	4	2	1	.....
Pregnancies:								
1.....	213	213	.....	.....	.....	.....	.....	.....
2.....	168	156	12	.....	.....	.....	.....	.....
3.....	118	96	19	3	.....	.....	.....	.....
4.....	66	47	12	6	1	.....	.....	.....
5.....	43	30	11	2	.....	.....	.....	.....
6.....	28	22	2	4	.....	.....	.....	.....
7.....	17	10	5	1	1	.....	.....	.....
8.....	19	14	2	2	1	.....	.....	.....
9.....	16	7	4	2	1	2	.....	.....
10.....	8	5	2	1	.....	.....	.....	.....
11.....	3	.....	2	1	.....	.....	.....	.....
12.....	4	2	2	.....	.....	.....	.....	.....
13.....	1	.....	.....	.....	.....	.....	1	.....
Foreign-born mothers.....	1,451	1,190	162	55	30	10	3	1
Pregnancies:								
1.....	253	253	.....	.....	.....	.....	.....	.....
2.....	242	225	17	.....	.....	.....	.....	.....
3.....	213	192	21	.....	.....	.....	.....	.....
4.....	190	161	27	2	.....	.....	.....	.....
5.....	164	132	21	8	3	.....	.....	.....
6.....	98	66	22	7	3	.....	.....	.....
7.....	102	64	16	15	7	.....	.....	.....
8.....	59	40	9	5	2	3	.....	.....
9.....	41	21	6	8	4	2	.....	.....
10.....	42	21	11	5	2	2	1	.....
11.....	22	7	8	2	3	1	.....	1
12.....	11	6	1	1	2	1	.....	.....
13.....	4	.....	2	1	.....	.....	1	.....
14.....	3	.....	1	1	1	.....	.....	.....
15.....	3	.....	.....	.....	3	.....	.....	.....
16.....	2	1	.....	.....	.....	1	.....	.....
18.....	1	1	.....	.....	.....	.....	.....	.....
19.....	1	.....	.....	.....	.....	.....	1	.....

^a Including miscarriages.

TABLE 13.—Births during selected year to mothers of specified nativity, according to usual help in household.

Usual help in household.	Births during selected year to—		
	All mothers.	Native mothers.	Foreign-born mothers.
Total.....	2,197	718	1,479
No hired help.....	1,740	456	1,284
Laundress or other partial help.....	371	201	170
Servant kept.....	71	55	16
Mother boards.....	9	3	6
Not reported.....	6	3	3

TABLE 14.—Births during selected year to mothers gainfully employed in specified way during year before birth of infant, according to length of interval between mother's ceasing work and confinement, and nationality of mother.

Interval between mother's ceasing work and confinement, and nationality of mother.	Births during selected year.								
	Total.	To mothers gainfully employed during year preceding birth of infant.							
		Total.	At home.		Away from home.				
			Keeping lodgers.	Other home work.	In factories.		In clerical occupations.	As sales-women.	All other.
					Metal.	All other.			
All mothers.....	2,197	716	519	39	95	15	7	5	36
Gainfully employed.....	716	716	519	39	95	15	7	5	36
Interval:									
Under 2 weeks.....	522	522	485	25	2			3	7
2 weeks, under 1 month.....	11	11	9	2					
1 month, under 3.....	37	37	6	3	15	3	1		9
3 months, under 9.....	118	118	15	3	66	10	5	2	17
9 months or more.....	24	24	1	5	12	2	1		3
Not reported.....	4	4	3	1					
Not gainfully employed.....	1,480								
Not reported.....	1								
Native mothers.....	718	123	58	13	30	3	7	1	11
Gainfully employed.....	123	123	58	13	30	3	7	1	11
Interval:									
Under 2 weeks.....	56	56	47	7					2
2 weeks, under 1 month.....	2	2	2						
1 month, under 3.....	13	13	2	2	5		1		3
3 months, under 9.....	40	40	5	1	20	2	5	1	6
9 months or more.....	11	11	1	3	5	1	1		
Not reported.....	1	1	1						
Not gainfully employed.....	594								
Not reported.....	1								
Foreign-born mothers.....	1,479	593	461	26	65	12		4	25
Gainfully employed.....	593	593	461	26	65	12		4	25
Interval:									
Under 2 weeks.....	466	466	438	18	2			3	5
2 weeks, under 1 month.....	9	9	7	2					
1 month, under 3.....	24	24	4	1	10	3			6
3 months, under 9.....	78	78	10	2	46	8		1	11
9 months or more.....	13	13		2	7	1			3
Not reported.....	3	3	2	1					
Not gainfully employed.....	886								

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TABLE 14.—*Births during selected year to mothers gainfully employed in specified way during year before birth of infant, according to length of interval between mother's ceasing work and confinement, and nationality of mother—Continued.*

[illegible]

TABLE 15.—*All known issues during selected year to mothers of specified nationality, according to kind of attendant at birth, registration status, and inclusion in or exclusion from detailed analysis.*

Kind of attendant, registration status, and inclusion of birth in or exclusion from detailed analysis.	Issues during selected year to—								Mothers with nativity not reported.
	All mothers.	Native mothers.	Foreign-born mothers.						
			Total.	Italian.	Lithuanian.	Irish.	All other.	Not reported.	
All births.....	2,654	882	1,680	723	282	216	411	48	92
Physician (at hospital).....	309	221	85	12	4	30	35	4	3
Physician (not at hospital) a.....	1,452	625	822	184	113	178	310	37	5
Midwife.....	724	30	694	490	146	2	55	1	.....
Other, none, or not reported.....	169	6	79	37	19	6	11	6	84
Registered.....	2,323	860	1,457	700	111	210	393	43	6
Physician (at hospital).....	297	212	82	10	4	30	34	4	3
Physician (not at hospital).....	1,413	614	796	177	100	177	305	37	3
Midwife.....	568	28	540	480	6	2	51	1	.....
Other, none, or not reported.....	45	6	39	33	1	1	3	1	.....
Unregistered.....	331	22	223	23	171	6	18	5	83
Physician (at hospital).....	12	9	3	2	.....	.....	1	.....	.....
Physician (not at hospital).....	39	11	26	7	13	1	5	.....	2
Midwife.....	156	2	154	10	140	.....	4	.....	.....
Other, none, or not reported.....	124	.....	40	4	18	5	8	5	84
Births included in detailed analysis.....	2,197	718	1,479	651	267	200	361	.....	.....
Physician (at hospital).....	209	153	56	9	3	23	21	.....	.....
Physician (not at hospital).....	1,250	534	716	162	104	169	281	.....	.....
Midwife.....	669	27	642	447	144	2	49	.....	.....
Other, none, or not reported.....	69	4	65	33	16	6	10	.....	.....
Registered.....	1,970	703	1,267	628	102	194	343	.....	.....
Physician (at hospital).....	203	150	53	7	3	23	20	.....	.....
Physician (not at hospital).....	1,214	523	691	155	92	168	276	.....	.....
Midwife.....	516	26	490	437	6	2	45	.....	.....
Other, none, or not reported.....	37	4	33	29	1	1	2	.....	.....
Unregistered.....	227	15	212	23	165	6	18	.....	.....
Physician (at hospital).....	6	3	3	2	.....	.....	1	.....	.....
Physician (not at hospital).....	36	11	25	7	12	1	5	.....	.....
Midwife.....	153	1	152	10	138	.....	4	.....	.....
Other, none, or not reported.....	32	.....	32	4	15	5	8	.....	.....
Births excluded from detailed analysis.....	457	164	201	72	15	16	50	48	92
Physician (at hospital).....	100	68	29	3	1	7	14	4	3
Physician (not at hospital).....	202	91	106	22	9	9	29	37	5
Midwife.....	55	3	52	43	2	.....	6	1	.....
Other, none, or not reported.....	100	2	14	4	3	.....	1	6	84
Registered.....	353	157	190	72	9	16	50	43	6
Physician (at hospital).....	94	62	29	3	1	7	11	4	3
Physician (not at hospital).....	199	91	105	22	8	9	29	37	3
Midwife.....	52	2	50	43	.....	.....	6	1	.....
Other, none, or not reported.....	8	2	6	4	.....	.....	1	1	.....
Unregistered.....	104	7	11	.....	6	.....	.....	5	83
Physician (at hospital).....	6	6	.....	.....	.....	.....	.....	.....	.....
Physician (not at hospital).....	8	.....	1	.....	1	.....	.....	.....	2
Midwife.....	3	1	2	.....	2	.....	.....	.....	.....
Other, none, or not reported.....	92	.....	8	.....	3	.....	.....	5	84

^a Including 55 cases attended by both physician and midwife; 2 mothers were native, 27 Italian, 23 Lithuanian, and 3 of other foreign nationality.

TABLE 16.—All known issues during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, according to kind of attendant at birth, registration status, and inclusion in or exclusion from detailed analysis.

Kind of attendant, registration status, and inclusion of birth in or exclusion from detailed analysis.	Total issues.	Live births.	Infant deaths.	Infant mortality rate. ^a	Stillbirths and miscarriages.	
					Number.	Per cent of total issues. ^a
All births.....	2,654	2,568	311	121.1	86	3.2
Physician (at hospital).....	309	295	43	145.8	14	4.5
Physician (not at hospital) ^b	1,452	1,388	171	123.2	64	4.4
Midwife.....	724	716	81	113.1	8	1.1
Other, none, or not reported.....	169	169	16	94.7	.....	.....
Registered.....	2,323	2,239	259	115.7	84	3.6
Physician (at hospital).....	297	284	38	133.8	13	4.4
Physician (not at hospital).....	1,413	1,350	164	121.5	63	4.5
Midwife.....	568	560	53	94.6	8	1.4
Other, none, or not reported.....	45	45	4	.....	.....	.....
Unregistered.....	331	329	52	158.1	2	.6
Physician (at hospital).....	12	11	5	.....	1	.....
Physician (not at hospital).....	39	38	7	.....	1	.....
Midwife.....	156	156	28	179.5	.....	.....
Other, none, or not reported.....	124	124	12	96.8	.....	.....
Births included in detailed analysis.....	2,197	2,144	263	122.7	53	2.4
Physician (at hospital).....	209	207	34	164.3	2	1.0
Physician (not at hospital).....	1,250	1,206	148	122.7	44	3.5
Midwife.....	669	662	75	113.3	7	1.0
Other, none, or not reported.....	69	69	6	.....	.....	.....
Registered.....	1,970	1,918	222	115.7	52	2.6
Physician (at hospital).....	203	201	31	154.2	2	1.0
Physician (not at hospital).....	1,214	1,171	142	121.3	43	3.5
Midwife.....	516	509	47	92.3	7	1.4
Other, none, or not reported.....	37	37	2	.....	.....	.....
Unregistered.....	227	226	41	181.4	1	.4
Physician (at hospital).....	6	6	3	.....	.....	.....
Physician (not at hospital).....	36	35	6	.....	1	.....
Midwife.....	153	153	28	183.0	.....	.....
Other, none, or not reported.....	32	32	4	.....	.....	.....
Births excluded from detailed analysis..	457	424	48	113.2	33	7.2
Physician (at hospital).....	100	88	9	.....	12	12.0
Physician (not at hospital).....	202	182	23	126.4	20	9.9
Midwife.....	55	54	6	.....	1	.....
Other, none, or not reported.....	100	100	10	100.0	.....	.....
Registered.....	353	321	37	115.3	32	9.1
Physician (at hospital).....	94	83	7	.....	11	.....
Physician (not at hospital).....	199	179	22	122.9	20	10.1
Midwife.....	52	51	6	.....	1	.....
Other, none, or not reported.....	8	8	2	.....	.....	.....
Unregistered.....	104	103	11	106.8	1	1.0
Physician (at hospital).....	6	5	2	.....	1	.....
Physician (not at hospital).....	3	3	1	.....	.....	.....
Midwife.....	3	3	.....	.....	.....	.....
Other, none, or not reported.....	92	92	8	.....	.....	.....

^a Not shown where base is less than 100.

^b Including 55 cases attended by both physician and midwife—45 live births, 17 infant deaths, and 10 stillbirths.

TABLE 17.—*Births during selected year to mothers of specified nativity, according to kind and duration of help at confinement.*

Kind and duration of help at confinement.	Births during selected year to—		
	All mothers.	Native mothers.	Foreign-born mothers.
Total	2, 197	718	1, 479
None, or members of household.....	483	76	407
Trained nurse.....	195	113	82
Less than 1 week.....	18	11	7
1 week but less than 2.....	59	29	30
2 weeks but less than 1 month.....	97	56	41
1 month or more.....	21	17	4
Hospital	209	150	59
Less than 1 week.....	4	3	1
1 week but less than 2.....	71	53	18
2 weeks but less than 1 month.....	125	89	36
1 month or more.....	5	4	1
Not reported.....	4	1	3
Other help	1, 307	377	930
Less than 1 week.....	71	9	62
1 week but less than 2.....	408	84	324
2 weeks but less than 1 month.....	527	203	324
1 month or more.....	299	81	218
Not reported.....	2	.....	2
Not reported	3	2	1

TABLE 18.—*Live births during selected year to all mothers and to mothers who died within one year after birth of infant and infant deaths, according to nativity of mother and interval between confinement and death of mother.*

Nativity of mother and interval between confinement and death of mother.	Live births.	Infant deaths.
All mothers.....	2,144	253
Died during the year.....	16	7
Number of months after confinement:		
Under 1 month.....	10	6
3 months but less than 4.....	2	1
5 months but less than 6.....	1	
7 months but less than 8.....	1	
8 months but less than 9.....	1	
9 months or later.....	1	
Native mothers.....	705	63
Died during the year.....	8	2
Number of months after confinement:		
Under 1 month.....	4	2
3 months but less than 4.....	1	
7 months but less than 8.....	1	
8 months but less than 9.....	1	
9 months or later.....	1	
Foreign-born mothers.....	1,439	194
Died during the year.....	8	5
Number of months after confinement:		
Under 1 month.....	6	4
3 months but less than 4.....	1	1
5 months but less than 6.....	1	

TABLE 19.—*Infants born during selected year to mothers of specified nativity and surviving at beginning of the month, number and per cent of infants dying subsequently in first year, and infant deaths in specified month of life, according to month of life and type of feeding in the month.*

Month of life and type of feeding.	All mothers.				Native mothers.				Foreign-born mothers.			
	Total infant survivors. ^a	Subsequent infant deaths in—			Infant survivors. ^a	Subsequent infant deaths in—			Infant survivors. ^a	Subsequent infant deaths in—		
		First year.		Specified month.		First year.		Specified month.		First year.		Specified month.
		Number.	Per cent.			Number.	Per cent.			Number.	Per cent.	
First month.....	2,142	263	12.3	107	704	69	9.8	31	1,438	194	13.5	78
Breast exclusively.....	1,801	134	7.4	27	577	33	5.7	8	1,224	101	8.3	19
Mixed.....	52	8	15.4	2	16	2	12.5	1	36	6	16.7	1
Artificial exclusively.....	226	58	25.7	15	92	15	16.3	3	134	43	32.1	12
Not fed, died at once.....	63	63	.....	63	19	19	.....	19	44	44	.....	44
Second month.....	2,035	156	7.7	28	673	38	5.6	9	1,362	118	8.7	19
Breast exclusively.....	1,624	88	5.4	10	497	18	3.6	4	1,127	70	6.2	6
Mixed.....	95	10	10.5	5	36	3	8.3	3	59	7	11.9	2
Artificial exclusively.....	b 316	b 58	18.4	b 13	140	17	12.1	2	b 176	b 41	23.3	b 11
Third month.....	2,007	128	6.4	18	964	29	4.4	6	1,343	90	7.4	12
Breast exclusively.....	c1,479	c62	4.2	c6	447	14	3.1	1	c1,032	c48	4.7	c5
Mixed.....	c 128	c12	8.7	c3	41	.....	.....	.....	c97	c12	12.4	c3
Artificial exclusively.....	290	54	13.8	9	176	15	8.5	5	214	39	18.2	4
Fourth month.....	1,989	110	5.5	16	658	23	3.5	5	1,331	87	6.5	11
Breast exclusively.....	c1,336	c 41	3.1	c5	401	11	2.7	2	c935	c30	3.2	c3
Mixed.....	188	12	6.4	3	50	.....	.....	.....	138	12	8.7	3
Artificial exclusively.....	465	57	12.3	8	207	12	5.8	3	258	45	17.4	5
Fifth month.....	1,973	94	4.8	16	653	18	2.8	3	1,320	76	5.8	13
Breast exclusively.....	1,217	31	2.5	4	368	7	1.9	1	851	24	2.8	3
Mixed.....	249	12	4.8	2	67	2	3.0	.....	182	10	5.5	2
Artificial exclusively.....	c 507	c51	10.1	c10	220	9	4.1	2	c 287	c42	14.6	c8
Sixth month.....	1,957	78	4.0	19	650	15	2.3	3	1,307	63	4.8	16
Breast exclusively.....	1,077	24	2.2	3	319	4	1.3	.....	758	20	2.6	3
Mixed.....	334	10	3.0	3	91	3	3.3	.....	243	7	2.9	3
Artificial exclusively.....	546	44	8.1	13	240	8	3.3	3	306	36	11.8	10
Seventh month.....	1,938	59	3.0	7	647	12	1.9	1	1,291	47	3.6	6
Breast exclusively.....	875	18	2.1	2	258	2	.8	.....	617	16	2.6	2
Mixed.....	475	8	1.7	1	131	3	2.3	.....	344	5	1.5	1
Artificial exclusively.....	588	33	5.6	4	258	7	2.7	1	330	26	7.9	3
Eighth month.....	1,931	52	2.7	13	646	11	1.7	4	1,285	41	3.2	9
Breast exclusively.....	732	15	2.0	2	212	2	.9	.....	520	13	2.5	2
Mixed.....	573	7	1.2	3	165	3	1.8	2	408	4	1.0	1
Artificial exclusively.....	626	30	4.8	8	269	6	2.2	2	357	24	6.7	6
Ninth month.....	1,918	39	2.0	13	642	7	1.1	3	1,276	32	2.5	10
Breast exclusively.....	580	12	2.1	5	172	2	1.2	2	408	10	2.5	2
Mixed.....	677	5	.7	1	167	1	.5	.....	499	4	.8	1
Artificial exclusively.....	c 661	c22	3.3	c7	283	4	1.4	1	c378	c18	4.8	c8

^a Excluding 2 infants for whom feeding was not reported—1 with native mother and 1 with foreign-born mother.

^b Including 2 infants who died at beginning of month who were fed in specified way in preceding month.

^c Including 1 infant who died at beginning of month who was fed in specified way in preceding month.

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TABLE 20.—*Number and per cent distribution of infants born during selected year and surviving at end of specified month, by type of feeding during month specified, according to nationality of mother.*

Infants born during selected year and surviving at end of—																		
Type of feeding and nationality of mother.	First month.		Second month.		Third month.		Fourth month.		Fifth month.		Sixth month.		Seventh month.		Eighth month.		Ninth month.	
	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.
All mothers.....	2,035	100.0	2,007	100.0	1,969	100.0	1,973	100.0	1,957	100.0	1,938	100.0	1,931	100.0	1,918	100.0	1,905	100.0
Breast exclusively.....	1,774	87.2	1,614	80.4	1,473	74.1	1,331	67.5	1,213	62.0	1,074	55.4	873	45.2	730	38.1	575	30.2
Mixed.....	50	2.5	90	4.5	135	6.8	185	9.4	247	12.6	331	17.1	474	24.6	570	29.7	676	35.5
Artificial exclusively.....	211	10.4	303	15.1	381	19.2	457	23.2	497	25.4	533	27.5	584	30.2	618	32.2	654	34.3
Native mothers.....	673	100.0	664	100.0	653	100.0	653	100.0	650	100.0	647	100.0	646	100.0	642	100.0	639	100.0
Breast exclusively.....	569	84.6	493	74.3	446	67.8	399	61.1	365	56.2	319	49.3	258	39.9	212	33.0	170	26.6
Mixed.....	15	2.2	33	5.0	41	6.2	50	7.7	67	10.3	91	14.1	131	20.3	163	25.4	187	29.3
Artificial exclusively.....	89	13.2	138	20.8	171	26.0	204	31.2	218	33.5	237	36.6	257	39.8	267	41.6	282	44.1
Foreign-born moth-ers.....	1,362	100.0	1,343	100.0	1,331	100.0	1,320	100.0	1,307	100.0	1,291	100.0	1,285	100.0	1,276	100.0	1,266	100.0
Breast exclusively.....	1,205	88.5	1,121	83.5	1,027	77.2	932	70.6	848	64.9	755	58.5	615	47.9	518	40.6	405	32.0
Mixed.....	35	2.6	57	4.2	94	7.1	135	10.2	180	13.8	240	18.6	343	26.7	407	31.9	489	38.6
Artificial exclusively.....	122	9.0	165	12.3	210	15.8	253	19.2	279	21.4	296	22.9	327	25.5	351	27.5	372	29.4
Italian mothers.	596	100.0	592	100.0	585	100.0	582	100.0	580	100.0	577	100.0	574	100.0	571	100.0	567	100.0
Breast exclusively.....	551	92.5	526	88.9	493	84.3	453	77.8	416	71.7	366	63.4	305	53.1	255	44.7	209	36.9
Mixed.....	18	3.0	26	4.4	42	7.2	61	10.5	84	14.5	123	21.3	171	29.8	209	36.6	240	42.3
Artificial exclusively.....	27	4.5	40	6.8	50	8.6	68	11.7	80	13.8	88	15.3	98	17.1	107	18.7	118	20.8
Lithuanian mothers.....	244	100.0	235	100.0	232	100.0	228	100.0	223	100.0	218	100.0	216	100.0	214	100.0	211	100.0
Breast exclusively.....	197	80.7	177	75.3	151	65.1	127	55.7	109	48.9	97	44.5	72	33.3	59	27.6	46	21.8
Mixed.....	7	2.9	6	2.6	12	5.2	25	11.0	33	14.8	35	16.1	48	22.2	51	23.8	61	28.9
Artificial exclusively.....	40	16.4	52	22.1	69	29.7	76	33.3	81	36.3	86	39.5	96	44.4	104	48.6	104	49.3

Irish mothers...	182	100.0	180	100.0	178	100.0	175	100.0	170	100.0	167	100.0	166	100.0	163	100.0
Breast exclusively.....	161	88.5	151	83.9	140	78.7	132	75.4	120	70.6	109	65.3	80	48.2	61	37.4
Mixed.....	3	1.7	6	3.3	11	6.2	13	7.4	17	10.0	22	13.2	41	24.7	54	33.1
Artificial exclusively..	18	9.9	23	12.8	27	15.2	30	17.1	33	19.4	36	21.6	45	27.1	48	29.5
Other foreign-born mothers..	340	100.0	336	100.0	336	100.0	335	100.0	334	100.0	329	100.0	325	100.0	325	100.0
Breast exclusively.....	296	87.1	267	79.5	243	72.3	220	65.7	203	60.8	183	55.6	124	38.2	89	27.4
Mixed.....	7	2.1	19	5.7	29	8.6	36	10.8	46	13.8	60	18.2	106	32.6	134	41.2
Artificial exclusively..	37	10.9	50	14.9	64	19.1	79	23.6	85	25.5	86	26.1	95	29.2	102	31.4

a Excluding 2 infants for whom feeding was not reported—1 with native mother and 1 with foreign-born mother.

TABLE 21.—*Infants born during selected year and surviving at end of 3, 6, and 9 months whose fathers earned specified amount, and number and per cent of subsequent infant deaths during first year, according to type of feeding throughout specified period and nativity of mother.*

Type of feeding throughout specified period and nativity of mother.	Earnings of father.										Subsequent infant deaths.	Total infant survivors. ^a															
	Under \$450.		\$450 to \$549		\$550 to \$649		\$650 to \$849		\$850 to \$1,049				\$1,050 to \$1,249		\$1,250 and over.		No earnings.	Not reported.									
	Infant survivors.	Subsequent infant deaths. Number.	Subsequent infant deaths. Per cent.	Infant survivors.	Subsequent infant deaths. Number.	Subsequent infant deaths. Per cent.	Infant survivors.	Subsequent infant deaths. Number.	Subsequent infant deaths. Per cent.	Infant survivors.			Subsequent infant deaths. Number.	Subsequent infant deaths. Per cent.	Infant survivors.	Subsequent infant deaths. Number.			Subsequent infant deaths. Per cent.								
ALL MOTHERS.	1,989	110	5.5	437	34	7.8	278	19	6.8	258	18	7.0	375	17	4.5	291	14	4.8	127	5	3.9	178	1	0.6	28	1	Subsequent infant deaths.
	1,467	55	3.7	341	21	6.2	213	9	4.2	192	7	3.6	268	9	3.4	208	5	2.4	87	2	2.3	130	1	...	18	1	Infant survivors.
	36	1	2.8	6	...	...	3	...	...	7	1	14.3	6	...	...	4	...	...	...	...	...	10	...	...	...	...	Subsequent infant deaths.
	190	26	13.7	34	5	14.7	20	5	25.0	24	4	16.7	40	5	12.5	26	4	15.4	19	2	10.5	19	1	5.3	6	...	Infant survivors.
	286	28	9.5	56	8	14.3	42	5	11.9	35	6	17.1	61	3	4.9	53	5	9.4	21	1	4.8	19	...	...	4	...	Subsequent infant deaths.
	1,938	59	3.0	422	19	4.5	289	10	3.7	249	9	3.6	370	12	3.2	283	6	2.1	123	1	.8	177	...	...	23	1	Infant survivors.
	1,070	21	2.0	236	7	3.0	155	2	1.3	132	2	1.5	207	6	2.9	157	2	1.3	64	...	...	98	...	...	15	1	Subsequent infant deaths.
	27	1	3.7	6	...	...	3	...	...	3	1	33.3	5	...	...	2	...	...	...	...	...	8	...	...	...	...	Infant survivors.
	177	13	7.8	30	1	3.3	19	4	21.1	29	2	9.1	39	4	10.8	24	2	8.3	17	...	...	18	...	...	6	...	Subsequent infant deaths.
	604	24	3.6	150	11	7.3	92	4	4.3	92	4	4.3	119	2	1.7	100	2	2.0	42	1	2.4	53	...	...	7	...	Infant survivors.
NATIVE MOTHERS.	1,905	26	1.4	410	7	1.7	267	8	3.0	244	4	1.6	303	5	1.4	279	2	.7	122	...	...	177	...	...	27	...	Subsequent infant deaths.
	572	7	1.2	132	2	1.5	86	2	2.3	70	1	1.4	111	3	1.8	81	...	...	35	...	...	49	...	...	5	...	Infant survivors.
	21	...	...	5	...	...	3	...	...	2	...	...	5	...	...	1	...	...	...	...	...	6	...	...	...	...	Subsequent infant deaths.
	170	7	4.1	28	...	...	19	4	21.1	21	1	4.8	36	1	2.8	23	1	4.3	17	...	...	13	...	...	6	...	Infant survivors.
	1,142	12	1.1	245	5	2.0	159	2	1.3	151	2	1.3	211	2	.9	174	1	.6	70	...	...	105	...	...	16	...	Subsequent infant deaths.
	658	23	3.5	33	2	6.1	39	2	5.1	60	2	3.3	101	5	3.1	148	7	4.7	78	2	2.6	127	1	.8	7	1	Infant survivors.
	445	12	2.7	22	2	9.1	27	2	7.4	41	...	...	108	4	3.7	98	1	1.0	54	1	1.9	86	...	...	4	1	Subsequent infant deaths.
	12	...	...	...	...	...	...	...	...	1	...	...	2	...	...	1	...	...	...	...	...	8	...	...	...	...	Infant survivors.
	83	6	7.2	4	...	...	3	...	...	6	1	10.7	22	1	4.5	18	3	16.7	11	...	...	18	...	...	1	...	Subsequent infant deaths.
	118	5	4.2	7	...	...	9	...	...	12	1	8.3	20	...	...	31	8	10.0	13	1	7.7	13	...	...	2	...	Infant survivors.

First 6 months.....	647	12	1.9	33	2	0.1	37	.....	60	2	3.3	189	4	2.5	143	2	1.4	76	.....	126	.....	5	1	7	1
Breast exclusively.....	318	4	1.3	12	.....	.....	20	.....	26	.....	.....	79	1	1.3	75	1	1.3	39	.....	62	.....	1	1	4	1
Mixed.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	1	.....	.....	.....	6	.....	.....	.....	.....	.....
Artificial exclusively.....	80	3	3.8	4	.....	.....	3	.....	6	1	16.7	23	1	4.5	10	1	6.3	11	.....	17	.....	.....	.....	1	.....
.....	240	6	2.1	17	2	11.8	14	.....	28	1	3.6	57	2	3.5	51	.....	26	.....	41	.....	4	.....	2	.....	
.....	639	4	.....	32	1	3.1	37	.....	59	1	1.7	158	2	1.3	141	.....	76	.....	126	.....	4	.....	6	.....	
.....	170	.....	.....	7	.....	.....	13	.....	16	.....	.....	44	.....	.....	38	.....	20	.....	31	.....	.....	.....	1	.....	
.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....
.....	79	2	2.5	4	.....	.....	8	.....	6	1	15.7	22	1	4.5	16	.....	11	.....	17	.....	.....	.....	1	.....	
.....	385	2	.....	21	.....	.....	.....	.....	37	.....	.....	90	1	1.1	88	.....	45	.....	75	.....	4	.....	4	.....	
FOREIGN-BORN MOTHERS.																										
First 3 months.....	1,331	87	6.5	404	32	7.9	239	17	7.1	16	8.1	214	12	5.6	143	7	4.9	49	.....	51	.....	12	.....	21	.....
Breast exclusively.....	1,022	43	4.2	319	19	6.0	186	7	3.8	7	4.6	160	5	3.1	110	4	3.6	33	.....	42	.....	7	.....	14	.....
Mixed.....	24	1	4.2	6	.....	.....	3	.....	6	.....	16.7	4	.....	.....	3	.....	.....	.....	2	.....	.....	.....	.....	.....
Artificial exclusively.....	107	20	18.7	30	5	16.7	17	5	28.4	18	16.7	15	4	2.2	8	1	12.5	8	.....	1	.....	.....	.....	5	.....
More than one type.....	178	23	12.9	49	8	16.3	33	5	15.2	23	21.7	32	3	9.4	22	2	9.1	8	.....	6	.....	.....	.....	2	.....
First 6 months.....	1,291	47	3.6	399	17	4.4	732	10	4.3	189	7	210	8	3.8	140	4	2.9	47	.....	51	.....	12	.....	21	.....
Breast exclusively.....	1,752	17	2.3	224	7	8.1	135	2	1.5	106	2	1.9	128	5	3.9	82	1	1.2	25	36	5	11
Mixed.....	18	1	5.6	6	.....	.....	3	.....	8	.....	33.3	8	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....
Artificial exclusively.....	97	10	10.3	26	1	3.8	16	4	25.0	16	1	6.3	17	3	17.6	8	1	13.5	6	.....	1	.....	.....	5	.....
More than one type.....	424	19	4.5	133	9	6.8	78	4	5.1	64	3	4.7	93	.....	.....	49	2	4.1	16	.....	13	.....	.....	5	.....
First 9 months.....	1,266	22	1.7	378	6	1.6	230	8	3.5	185	3	1.6	205	3	1.5	138	2	1.4	45	51	12	21
Breast exclusively.....	1,402	7	1.7	125	2	1.6	73	2	2.7	54	1	1.9	67	2	3.0	43	.....	15	.....	18	.....	.....	.....	4	.....
Mixed.....	16	.....	.....	5	.....	.....	3	.....	.....	2	.....	8	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....
Artificial exclusively.....	91	6	5.5	24	.....	.....	16	4	25.0	15	.....	14	.....	.....	.....	8	1	12.5	6	.....	1	.....	.....	5	.....
More than one type.....	757	10	1.3	234	4	3.8	138	2	1.4	114	2	1.8	121	1	86	1	1.2	25	30	7	12

c Excluding 2 infants for whom feeding was not reported—1 with native mother and 1 with foreign-born mother.

INFANT MORTALITY.

TABLE 22.—*Infants born during selected year and surviving at end of 3, 6, and 9 months of age whose fathers earned specified amount, and number and per cent artificially fed, according to nationality of mother.*

Infants born during selected year—										
Infants living and artificially fed at specified ages and nationality of mother.	Total.	Whose fathers earned specified amount.						No earnings.	Not reported.	
		Under \$450.		\$450 to \$549	\$650 to \$849	\$850 to \$1,049	\$1,050 to \$1,249			\$1,250 and over.
ALL MOTHERS.										
Infants living at end of 3 months.....	1,989	437	278	258	375	291	127	178	17	28
Number artificially fed.....	381	72	43	49	80	59	36	30	4	8
Per cent artificially fed.....	19.2	16.5	15.5	19.0	21.3	20.3	28.3	16.9	23.5	28.6
Infants living at end of 6 months.....	1,533	422	269	249	370	293	123	177	17	26
Number artificially fed.....	538	102	59	66	110	82	46	52	6	10
Per cent artificially fed.....	27.5	24.2	21.9	26.5	29.7	29.0	37.4	29.4	35.3	35.7
Infants living at end of 9 months.....	1,905	410	267	244	363	279	122	177	16	27
Number artificially fed.....	634	126	72	80	128	101	50	75	8	14
Per cent artificially fed.....	34.3	30.7	27.0	32.8	35.3	36.2	41.0	42.4	50.0	51.9
NATIVE MOTHERS.										
Infants living at end of 3 months.....	658	33	39	60	161	146	78	137	6	7
Number artificially fed.....	171	11	10	17	41	41	22	26	.....	3
Per cent artificially fed.....	26.0	33.3	25.6	28.3	25.5	27.7	28.2	20.5	.....	42.9
Infants living at end of 6 months.....	647	33	37	60	160	143	76	126	5	7
Number artificially fed.....	237	15	12	26	57	49	28	45	2	3
Per cent artificially fed.....	20.6	45.5	32.4	43.3	35.6	34.3	36.8	35.7	40.0	42.9
Infants living at end of 9 months.....	639	32	37	59	153	141	76	126	4	6
Number artificially fed.....	262	16	12	29	66	58	32	63	3	4
Per cent artificially fed.....	44.1	50.0	32.4	49.2	41.1	41.1	42.1	50.0	75.0	66.7
FOREIGN-BORN MOTHERS.										
Infants living at end of 3 months.....	1,331	404	239	198	214	143	49	51	12	21
Number artificially fed.....	210	61	33	32	39	18	14	4	4	5
Per cent artificially fed.....	15.8	15.1	13.8	16.2	18.2	12.6	28.6	7.8	33.3	23.8
Infants living at end of 6 months.....	1,291	389	232	180	210	140	47	51	12	21
Number artificially fed.....	296	57	47	40	53	33	18	7	4	7
Per cent artificially fed.....	22.9	22.4	20.3	21.2	25.2	23.6	38.3	13.7	33.3	33.3
Infants living at end of 9 months.....	1,266	378	230	185	205	138	46	51	12	21
Number artificially fed.....	372	110	60	51	68	43	13	12	5	10
Per cent artificially fed.....	29.4	29.1	26.1	27.6	30.7	31.2	30.1	23.5	41.7	47.6

<i>Italian mothers.</i>													
Infants living at end of 3 months.....	535	229	123	93	63	36	6	14	8	6	2	2	6
Number artificially fed.....	50	21	6	7	6	2	1	1	2	1	2	2	2
Per cent artificially fed.....	8.6	9.2	6.3	7.5	9.5	5.6	12.5	7.1	25.0	25.0	33.3	33.3	33.3
Infants living at end of 6 months.....	577	225	127	91	62	36	6	14	8	6	2	2	6
Number artificially fed.....	88	36	13	14	10	7	2	2	2	2	2	2	2
Per cent artificially fed.....	15.3	16.0	10.2	15.4	16.1	19.4	25.0	14.3	25.0	25.0	33.3	33.3	33.3
Infants living at end of 9 months.....	607	219	126	89	61	36	6	14	8	6	2	2	6
Number artificially fed.....	118	51	17	18	13	10	2	3	2	2	2	2	2
Per cent artificially fed.....	20.8	23.3	13.5	20.2	21.3	27.8	25.0	21.4	25.0	25.0	33.3	33.3	33.3
<i>Lithuanian mothers.</i>													
Infants living at end of 3 months.....	233	97	55	32	23	11	2	4	2	2	5	5	5
Number artificially fed.....	69	26	16	15	5	3	1	1	1	1	1	1	1
Per cent artificially fed.....	29.7	28.9	28.6	48.9	21.7	27.3	22.2	25.0	50.0	50.0	20.0	20.0	20.0
Infants living at end of 6 months.....	218	93	51	29	23	10	2	4	2	2	5	5	5
Number artificially fed.....	86	34	21	15	9	4	1	1	1	1	1	1	1
Per cent artificially fed.....	39.5	37.0	41.2	51.7	39.1	40.0	50.0	25.0	50.0	50.0	20.0	20.0	20.0
Infants living at end of 9 months.....	211	88	50	29	22	9	2	4	2	2	5	5	5
Number artificially fed.....	104	39	29	17	9	3	1	1	1	1	1	1	1
Per cent artificially fed.....	49.3	44.3	58.0	58.6	40.9	33.3	50.0	25.0	100.0	100.0	60.0	60.0	60.0
<i>Irish mothers.</i>													
Infants living at end of 3 months.....	178	26	25	29	46	31	9	7	9	9	3	3	3
Number artificially fed.....	27	6	3	3	8	8	2	1	1	1	1	1	1
Per cent artificially fed.....	15.2	21.4	12.0	10.3	17.4	9.7	22.2	11.5	22.2	22.2	66.7	66.7	66.7
Infants living at end of 6 months.....	167	23	25	26	44	30	9	7	9	9	3	3	3
Number artificially fed.....	36	8	6	3	9	5	3	1	1	1	1	1	1
Per cent artificially fed.....	21.6	34.8	24.0	11.5	20.5	16.7	33.3	11.5	33.3	33.3	66.7	66.7	66.7
Infants living at end of 9 months.....	163	23	25	25	42	29	9	7	9	9	3	3	3
Number artificially fed.....	48	11	6	3	12	8	4	2	1	1	1	1	1
Per cent artificially fed.....	29.5	47.8	24.0	12.0	28.6	27.6	44.4	28.6	44.4	44.4	66.7	66.7	66.7
<i>Other foreign-born mothers.</i>													
Infants living at end of 3 months.....	336	50	30	44	82	65	30	26	2	2	7	7	7
Number artificially fed.....	64	6	6	7	20	10	11	3	1	1	1	1	1
Per cent artificially fed.....	19.1	12.0	20.0	15.9	24.4	15.4	36.7	11.5	50.0	50.0	28.6	28.6	28.6
Infants living at end of 6 months.....	329	49	29	43	81	64	23	26	2	2	7	7	7
Number artificially fed.....	86	9	7	8	23	17	12	5	1	1	1	1	1
Per cent artificially fed.....	26.1	18.4	24.1	18.6	30.9	26.6	42.9	19.2	50.0	50.0	28.6	28.6	28.6
Infants living at end of 9 months.....	326	48	29	42	80	64	27	26	2	2	7	7	7
Number artificially fed.....	102	9	8	13	29	22	11	6	1	1	1	1	1
Per cent artificially fed.....	31.4	18.6	27.5	31.0	36.3	34.4	40.7	23.1	30.0	30.0	42.9	42.9	42.9

* Excluding 2 infants for whom feeding was not reported—1 with native mother and 1 with foreign-born mother.

TABLE 23.—*Infants born during selected year and weaned under 1 year of age, by age and reasons for weaning.*

Reason for weaning.	Total infants weaned.	Age in months at time of weaning.											
		1	2	3	4	5	6	7	8	9	10	11	12
All reasons.....	740	111	63	89	84	50	49	56	43	43	60	52	40
Mother pregnant.....	122	.....	.....	3	9	8	7	17	10	18	20	19	11
Illness of mother.....	79	18	8	5	11	5	8	4	5	1	4	4	6
Infection or other abnormal condition of breast.....	17	5	4	4	1	.....	1	1	.....	.....	1	.....	.....
Poor, insufficient, or no milk.....	365	74	43	58	52	32	19	24	16	15	16	10	6
Mother died.....	2	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Mother went to work.....	9	1	1	.....	1	1	1	1	1	.....	1	.....	1
Mother's judgment.....	58	2	.....	3	.....	1	4	2	4	6	11	13	12
Doctor's advice.....	42	5	1	7	3	2	4	4	4	2	3	4	3
Infant would not nurse.....	18	3	5	2	3	1	3	1	.....	.....	.....	.....	.....
Infant's illness.....	18	3	1	5	3	.....	.....	2	.....	.....	2	2	.....
Infant taken from mother.....	2	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
All other ^a	3	.....	.....	1	1	.....	.....	.....	.....	.....	1	.....	.....
Not reported.....	5	.....	.....	.....	.....	.....	.....	.....	2	1	1	.....	1

^a Including 1 weaned at visiting nurse's direction, 1 on account of mother caring for sick child, and 1 mother unable to nurse for reasons not stated.

TABLE 24.—*Births during selected year in each father's earnings group, according to occupation of father.*

Occupation of father.	Total births.	Earnings of father.								
		Under \$450.	\$450 to \$549	\$550 to \$649	\$650 to \$849	\$850 to \$1,049	\$1,050 to \$1,249	\$1,250 and over.	No earnings.	Not reported.
All occupations.....	2,197	492	316	286	416	308	135	192	22	39
Manufacturing and mechanical industries.....	1,499	418	242	206	276	193	82	70	1	11
Blacksmiths.....	14	1	4	2	1	4	.....	2	.....	.....
Boiler makers.....	2	.....	.....	.....	1	1	.....	.....	.....	.....
Builders and contractors.....	22	.....	.....	1	6	6	2	6	.....	1
Compositors, linotypers, and pressmen.....	8	.....	.....	1	1	2	2	2	.....	.....
Electricians, electrical engineers..	16	.....	.....	.....	7	5	1	2	.....	1
Factory operatives ^a	1,041	353	205	160	188	76	28	25	1	5
Metal.....	1,013	351	201	153	183	68	27	24	1	5
Rubber.....	2	.....	1	.....	1	.....	.....	.....	.....	.....
Other.....	26	2	3	7	4	8	1	1	.....	.....
Laborers, helpers, and apprentices (not in factory).....	35	23	7	2	3	.....	.....	.....	.....	.....
Machinists, millwrights, and toolmakers.....	110	3	2	7	26	45	22	5	.....	.....
Manufacturers, proprietors, managers, and officials.....	33	.....	.....	2	1	5	1	22	.....	2
Shoemakers and cobblers (not in factory).....	17	7	4	2	3	.....	.....	1	.....	.....
Skilled mechanics, building trades	129	20	11	18	24	32	20	3	.....	1
Tailors.....	24	5	4	5	4	5	.....	1	.....	.....
Engineers, firemen.....	29	6	4	4	7	3	4	.....	.....	1
Others in manufacturing and mechanical industries.....	19	.....	1	2	4	9	2	1	.....	.....
Trade.....	236	21	27	22	48	44	10	51	2	11
Bankers, brokers, real estate and insurance agents.....	21	.....	.....	.....	2	6	2	10	.....	1
Delivery men.....	50	7	6	8	22	6	.....	.....	.....	1
Laborers.....	15	3	6	4	1	.....	1	.....	.....	.....
Retail and wholesale dealers (proprietors, officials, and managers)	91	5	13	5	14	15	4	25	2	5
Salesmen and commercial travelers.....	41	4	1	2	5	10	2	16	.....	1
Others in trade.....	18	2	1	3	4	7	1	.....	.....	.....

^a Excluding persons engaged in work in the factory which is not peculiar to the industry, as clerks, machinists, boilermakers, etc.

TABLE 24.—Births during selected year in each father's earnings group, according to occupation of father—Continued.

Occupation of father.	Total births.	Earnings of father.								
		Under \$450.	\$450 to \$549.	\$550 to \$649.	\$650 to \$849.	\$850 to \$1,049.	\$1,050 to \$1,249.	\$1,250 and over.	No earnings.	Not reported.
Transportation.....	132	21	25	19	29	18	12	8		
Chauffeurs, teamsters, expressmen.....	49	10	9	10	14	4	1	1		
Conductors, motormen, and trainmen.....	27	2	1	2	8	7	5	2		
Express, post, telegraph, and telephone employees.....	8			1	1	1	4	1		
Laborers.....	26	8	12	4	2					
Proprietors, officials, and managers.....	5					1		4		
Others in transportation.....	17	1	3	2	4	5	2			
Public service.....	43	7	2	9	1	5	14	4		1
Firemen and policemen.....	18	1				3	12	2		
Laborers.....	19	6	2	9	1					1
Officials and inspectors.....	3					1		2		
Others in public service.....	3					1	2			
Professional and semiprofessional pursuits.....	52	1		4	4	6	7	30		
Domestic and personal service.....	113	14	13	12	33	21	4	17	1	3
Barbers.....	24	2	1	2	8	8	2	1		
Janitors and elevator operators.....	15	1	5	4	5					
Saloon keepers and bartenders.....	57	8	4	5	13	9	2	12	1	3
Servants.....	6	2			1	3				
Others in domestic and personal service.....	16	1	3	1	6	1		4		
Clerical occupations (all industries).....	72	3	3	10	20	18	6	10		2
Agriculture and forestry.....	15	4		2	3	2		2		2
Farmers or farm workers.....	14	3		2	3	2		2		2
Lumbermen and woodchoppers.....	1	1								
No occupation.....	18								18	
Not reported.....	12	3	4	2	2	1				

TABLE 25.—Number and per cent distribution of births during selected year to mothers of specified nativity, according to earnings of father.

Earnings of father.	Births during selected year to—					
	All mothers.		Native mothers.		Foreign-born mothers.	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
All classes.....	2, 197	100.0	718	100.0	1, 479	100.0
Under \$450.....	492	22.4	40	5.6	452	30.6
\$450 to \$549.....	316	14.4	46	6.4	270	18.3
\$550 to \$649.....	286	13.1	65	9.1	221	14.9
\$650 to \$849.....	416	18.9	179	24.8	237	16.0
\$850 to \$1,049.....	308	14.0	157	21.9	151	10.2
\$1,050 to \$1,249.....	135	6.1	81	11.3	54	3.7
\$1,250 and over.....	192	8.7	137	19.1	55	3.7
No earnings.....	22	1.0	6	.8	16	1.1
Not reported.....	30	1.4	7	1.0	23	1.6

TABLE 26.—*Births during selected year in families of specified number of persons and average number of persons per family, according to earnings of father and nativity of mother.*

Earnings of father and nativity of mother.	Average number of persons per family.	Births during selected year in—														
		Total.	Families of specified number ^a of persons.													
			1	2	3	4	5	6	7	8	9	10	11	12	14	Not reported. ^b
All mothers.....	4.0	2,197	5	582	527	355	291	170	120	69	38	19	7	2	2	10
Under \$450.....	4.0	492	....	108	117	93	77	43	28	12	4	7	....	....	....	3
\$450 to \$549.....	4.1	316	....	85	72	44	48	24	22	10	6	2	....	1	1	1
\$550 to \$649.....	4.0	286	....	69	68	51	39	23	15	13	6	....	....	....	....	2
\$650 to \$849.....	4.0	416	....	107	107	65	51	39	21	11	7	5	2	....	....	1
\$850 to \$1,049.....	3.8	308	....	107	67	45	32	18	16	7	9	1	4	....	1	1
\$1,050 to \$1,249.....	3.9	135	....	42	34	18	14	8	12	3	3	....	....	1	....	....
\$1,250 and over.....	3.7	192	1	53	55	33	22	9	3	9	2	2	1	....	....	2
No earnings.....	3.7	22	3	6	4	....	4	3	1	....	....	1	....	....	....	....
Not reported.....	4.9	30	1	5	3	6	4	3	2	4	1	1	....	....	....	....
Native mothers	3.5	718	3	256	202	107	52	31	24	18	10	5	3	....	....	7
Under \$450.....	3.4	40	....	15	14	3	2	2	....	1	....	2	....	....	....	1
\$450 to \$549.....	3.4	46	....	17	13	6	4	2	....	2	....	1	....	....	....	1
\$550 to \$649.....	3.4	65	....	25	19	7	6	2	1	2	2	....	....	....	....	1
\$650 to \$849.....	3.8	179	....	51	51	29	16	12	9	4	4	1	1	....	....	1
\$850 to \$1,049.....	3.4	157	....	69	36	25	7	5	8	2	2	....	2	....	....	1
\$1,050 to \$1,249.....	3.4	81	....	32	25	9	6	1	4	2	2	....	....	....	....	....
\$1,250 and over.....	3.4	137	1	42	41	28	10	6	2	4	....	1	....	....	....	2
No earnings.....	2.3	6	2	3	....	....	....	1	....	....	....	....	....	....	....	....
Not reported.....	3.7	7	....	2	3	....	1	....	....	1	....	....	....	....	....	....
Foreign-born mothers.....	4.2	1,479	2	326	325	248	239	139	96	51	28	14	4	2	2	3
Under \$450.....	4.1	452	....	93	103	90	75	41	28	11	4	5	....	....	....	2
\$450 to \$549.....	4.2	270	....	68	59	38	44	22	22	8	6	1	....	1	1	....
\$550 to \$649.....	4.2	221	....	44	49	44	33	21	14	11	4	....	....	....	....	1
\$650 to \$849.....	4.1	237	....	56	56	36	35	27	12	7	3	4	1	....	....	....
\$850 to \$1,049.....	4.4	151	....	38	31	20	25	13	8	5	7	1	2	....	1	....
\$1,050 to \$1,249.....	4.6	54	....	10	9	9	8	7	8	1	1	....	....	1	....	....
\$1,250 and over.....	4.5	55	....	11	14	5	12	3	1	5	2	1	1	....	....	....
No earnings.....	4.3	16	1	3	4	....	4	2	1	....	....	1	....	....	....	....
Not reported.....	5.3	23	1	3	....	6	3	3	2	3	1	1	....	....	....	....

^a Excluding infant born during selected year.^b Including 1 mother, a servant, not living as a member of family.

TABLE 27.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, according to earnings of father and nativity of mother.

Earnings of father and nativity of mother.	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^a	Stillbirths.	
					Num-ber.	Per cent of total births. ^a
All mothers.....	2, 197	2, 144	263	122. 7	53	2. 4
Under \$450.....	492	477	73	153. 0	15	3. 0
\$450 to \$549.....	316	304	45	148. 0	12	3. 8
\$550 to \$649.....	286	280	40	142. 9	6	2. 1
\$650 to \$849.....	416	407	48	117. 9	9	2. 2
\$850 to \$1,049.....	308	303	26	85. 8	5	1. 6
\$1,050 to \$1,249.....	135	134	12	89. 6	1	. 7
\$1,250 and over.....	192	190	13	68. 4	2	1. 0
No earnings.....	22	20	4	.....	2	.....
Not reported.....	30	29	2	.....	1	.....
Native mothers.....	718	705	69	97. 9	13	1. 8
Under \$450.....	40	40	9	.....	.....	.....
\$450 to \$549.....	46	45	8	.....	1	.....
\$550 to \$649.....	65	64	6	.....	1	.....
\$650 to \$849.....	179	176	19	108. 0	3	1. 7
\$850 to \$1,049.....	157	152	11	72. 4	5	3. 2
\$1,050 to \$1,249.....	81	80	4	.....	1	.....
\$1,250 and over.....	137	135	9	66. 7	2	1. 5
No earnings.....	6	6	2	.....	.....	.....
Not reported.....	7	7	1	.....	.....	.....
Foreign-born mothers.....	1, 479	1, 439	194	134. 8	40	2. 7
Under \$450.....	452	437	64	146. 5	15	3. 3
\$450 to \$549.....	270	259	37	142. 9	11	4. 1
\$550 to \$649.....	221	216	34	157. 4	5	2. 3
\$650 to \$849.....	237	231	29	125. 5	6	2. 5
\$850 to \$1,049.....	151	151	15	99. 3	.....	.....
\$1,050 to \$1,249.....	54	54	8	.....	.....	.....
\$1,250 and over.....	55	55	4	.....	.....	.....
No earnings.....	16	14	2	.....	2	.....
Not reported.....	23	22	1	.....	1	.....

^a Not shown where base is less than 100.

TABLE 28.—Number and per cent distribution of births during selected year in each father's earnings group, according to source of family income.

Source of family income.	Earnings of father.																	
	Total births.		Under \$550.		\$550 to \$649.		\$650 to \$849.		\$850 to \$1,049.		\$1,050 to \$1,249.		\$1,250 and over.		No earnings.		Not reported.	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
All sources.....	2,197	100.0	308	100.0	286	100.0	416	100.0	308	100.0	135	100.0	192	100.0	22	100.0	30	100.0
Derived from earnings only.....	1,958	89.2	762	94.3	259	90.6	379	91.1	267	86.7	116	85.9	133	69.8	17	77.3	25	83.3
Father only wage-earner.....	1,249	56.9	362	44.8	169	59.1	270	64.9	212	68.8	99	73.3	122	63.6	.....	.....	15	50.0
Other wage-earners, total earnings.....	709	32.3	400	49.5	90	31.5	109	26.2	55	17.9	17	12.6	11	5.7	17	77.3	10	33.3
Under \$550.....	340	10.9	226	27.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	63.7	.....	.....
\$550 to \$649.....	108	4.9	94	11.6	14	4.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
\$650 to \$849.....	139	6.4	49	6.1	55	19.3	34	8.2	.....	.....	.....	.....	.....	.....	1	4.5	.....	.....
\$850 to \$1,049.....	77	3.5	8	1.0	13	4.5	45	10.7	11	3.6	.....	.....	.....	.....	.....	.....	.....	.....
\$1,050 to \$1,249.....	61	2.8	8	1.0	4	1.4	14	3.4	27	3.8	8	5.9	.....	.....	.....	.....	.....	.....
\$1,250 and over.....	59	2.7	3	.4	4	1.4	14	3.4	17	5.5	9	6.7	11	5.7	.....	.....	1	3.3
Not reported.....	25	1.1	12	1.5	.....	.....	2	.5	.....	.....	.....	.....	.....	.....	2	9.1	9	30.0
Earnings supplemented by other income.....	235	10.7	46	5.7	27	9.4	37	8.9	41	13.3	19	14.1	59	30.7	3	13.6	3	10.0
No source.....	2	(a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	9.1	.....	.....
Not reported.....	2	(a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	6.7

(a) Less than one-tenth of 1 per cent.

TABLE 29.—*Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, according to nationality of mother and her employment at home or away from home during year before birth of infant.*

Employment of mother during year before birth of infant and nationality of mother.	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^a	Stillbirths.	
					Num-ber.	Per cent of total births. ^a
All mothers.....	2,197	2,144	263	122.7	53	2.4
Not gainfully employed.....	1,480	1,443	180	119.5	32	2.2
Gainfully employed.....	716	695	103	143.2	21	2.9
At home.....	558	542	71	131.0	16	2.9
Away from home.....	158	153	32	200.2	5	3.2
Not reported.....	1	1				
Native mothers.....	718	705	69	97.9	13	1.8
Not gainfully employed.....	594	583	54	92.6	11	1.9
Gainfully employed.....	123	121	15	124.0	2	1.6
At home.....	71	70	7		1	
Away from home.....	52	51	8		1	
Not reported.....	1	1				
Foreign-born mothers.....	1,479	1,430	194	134.8	40	2.7
Not gainfully employed.....	886	865	106	122.5	21	2.4
Gainfully employed.....	593	574	88	153.3	19	3.2
At home.....	487	472	64	135.6	15	3.1
Away from home.....	106	102	24	235.3	4	3.8
Italian mothers.....	651	628	69	109.9	23	3.5
Not gainfully employed.....	408	397	45	113.4	11	2.7
Gainfully employed.....	243	231	24	103.9	12	4.9
At home.....	215	203	20	98.5	12	5.6
Away from home.....	28	28	4			
Lithuanian mothers.....	267	260	54	207.7	7	2.6
Not gainfully employed.....	73	72	16		1	
Gainfully employed.....	194	188	38	202.1	6	3.1
At home.....	159	156	30	192.3	3	1.9
Away from home.....	35	32	8		3	
Irish mothers.....	200	195	36	184.6	5	2.5
Not gainfully employed.....	149	145	25	172.4	4	2.7
Gainfully employed.....	51	50	11		1	
At home.....	36	36				
Away from home.....	15	14	5		1	
Other foreign-born mothers.....	361	356	35	98.3	5	1.4
Not gainfully employed.....	256	251	20	79.7	5	2.0
Gainfully employed.....	105	105	15	142.9		
At home.....	77	77	8			
Away from home.....	28	28	7			

^a Not shown where base is less than 100.

INFANT MORTALITY.

TABLE 30.—*Live births during selected year, infant deaths, and infant mortality rate, according to working status of mother during year following birth of infant and infant's age when mother resumed gainful work away from home.*

Working status of mother during year following birth of infant.	Live births.	Survived one year.	Infant deaths.	Infant mortality rate. ^a
All mothers.....	2,144	1,881	263	122.7
No gainful work.....	1,478	1,313	165	111.6
Gainful work.....	666	568	98	147.1
Resumed after infant's death.....	42	.....	42	.....
Resumed during infant's life.....	623	568	55	88.3
Time of resumption not reported.....	1	.....	1	.....
Work in home.....	593	521	72	121.4
Resumed after infant's death.....	19	.....	19	.....
Resumed during infant's life.....	573	521	52	90.8
Time of resumption not reported.....	1	.....	1	.....
Work out of home.....	73	47	26	.....
Resumed after infant's death.....	23	.....	23	.....
Resumed during infant's life.....	50	47	3	.....
Infant's age at time of resumption:				
Less than 1 month.....	3	2	1	.....
1 month but less than 2.....	2	2	.....	.....
2 months but less than 3.....	6	6	.....	.....
3 months but less than 4.....	7	6	1	.....
4 months but less than 5.....	5	5	.....	.....
5 months but less than 6.....	5	4	1	.....
6 months or older.....	22	22	.....	.....

^a Not shown where base is less than 100.

TABLE 31.—*Live births during selected year, infant deaths, and infant mortality rate, according to occupation of mother during year following birth of infant.*

Occupation of mother during year following birth of infant.	Live births.	Infant deaths.	Infant mortality rate. ^a
All mothers.....	2,144	263	122.7
Not gainfully employed.....	1,478	165	111.6
Gainfully employed.....	666	98	147.1
At home.....	593	72	121.4
Keeping lodgers.....	544	64	117.6
Home work from factory.....	1	.....	.....
Other home work.....	48	8	.....
Away from home.....	73	26	.....
Servants.....	7	2	.....
Laundry operatives.....	3	1	.....
Others in domestic and personal service.....	14	5	.....
Factory operatives.....	40	15	.....
Textile.....	5	3	.....
Metal.....	35	12	.....
Other occupations.....	9	3	.....

^a Not shown where base is less than 100.

TABLE 32.—*Births during selected year in households of specified number of members, according to number of lodgers in family and nationality of mother.*

Number of lodgers in family and nationality of mother.	Births during selected year.												
	To- tal.	In households of specified number of members.											
		2	3	4	5	6	7	8	9	10	11	12 and over.	Not re- ported.
All mothers.....	2,197	280	362	372	342	281	208	140	107	50	26	23	6
No lodgers kept.....	1,659	280	324	292	254	186	119	86	63	26	11	15	3
Lodgers kept.....	535	.....	38	80	88	95	89	54	44	24	15	8	.....
1 lodger.....	178	.....	38	47	35	29	10	10	2	5	2	.....	.....
2 lodgers.....	164	.....	.....	33	37	32	36	10	9	6	1	.....	.....
3 lodgers.....	79	.....	.....	.....	16	21	13	14	8	5	1	1	.....
4 lodgers.....	65	.....	.....	.....	.....	13	20	10	15	2	5	.....	.....
5 lodgers.....	23	.....	.....	.....	.....	.....	10	3	4	4	1	1	.....
6 lodgers.....	17	.....	.....	.....	.....	.....	.....	7	5	2	1	2	.....
7 lodgers.....	4	.....	.....	.....	.....	.....	.....	.....	1	.....	2	1	.....
8 lodgers.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
9 lodgers.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
10 lodgers.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Not reported.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Native mothers.....	18	152	165	144	91	55	34	31	26	7	5	4	4
No lodgers kept.....	660	152	155	124	80	48	32	28	22	7	5	4	3
Lodgers kept.....	57	.....	10	20	11	7	2	3	4	.....	.....	.....	.....
1 lodger.....	44	.....	10	18	7	4	2	2	1	.....	.....	.....	.....
2 lodgers.....	10	.....	.....	2	4	3	.....	.....	1	.....	.....	.....	.....
3 lodgers.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
4 lodgers.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
6 lodgers.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Not reported.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Foreign-born mothers.....	1,479	128	197	228	251	226	174	109	81	43	21	19	2
No lodgers kept.....	999	128	169	168	174	138	87	58	41	19	6	11	.....
Lodgers kept.....	478	.....	28	60	77	88	87	51	40	24	15	8	.....
1 lodger.....	134	.....	28	29	28	25	8	8	1	5	2	.....	.....
2 lodgers.....	154	.....	.....	31	33	29	36	10	8	6	1	.....	.....
3 lodgers.....	78	.....	.....	.....	16	21	13	14	7	5	1	1	.....
4 lodgers.....	64	.....	.....	.....	.....	13	20	9	15	2	5	.....	.....
5 lodgers.....	23	.....	.....	.....	.....	.....	10	3	4	4	1	1	.....
6 lodgers.....	16	.....	.....	.....	.....	.....	.....	7	4	2	1	2	.....
7 lodgers.....	4	.....	.....	.....	.....	.....	.....	.....	1	.....	2	1	.....
8 lodgers.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
9 lodgers.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
10 lodgers.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Not reported.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Italian mothers.....	651	49	76	92	104	104	80	52	42	28	11	12	1
No lodgers kept.....	455	49	69	78	76	64	44	28	24	13	3	7	.....
Lodgers kept.....	195	.....	7	14	28	40	36	24	18	15	8	5	.....
1 lodger.....	54	.....	7	5	13	13	4	5	1	4	2	.....	.....
2 lodgers.....	59	.....	.....	9	10	14	17	2	3	3	1	.....	.....
3 lodgers.....	40	.....	.....	.....	5	8	7	10	5	4	1	.....	.....
4 lodgers.....	20	.....	.....	.....	.....	5	4	3	5	1	2	.....	.....
5 lodgers.....	11	.....	.....	.....	.....	.....	4	2	2	2	.....	1	.....
6 lodgers.....	5	.....	.....	.....	.....	.....	.....	2	1	1	.....	1	.....
7 lodgers.....	3	.....	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....
8 lodgers.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
10 lodgers.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Not reported.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Lithuanian mothers.....	267	13	21	39	47	43	46	26	18	6	5	3	.....
No lodgers kept.....	90	13	14	11	18	13	8	6	4	1	.....	2	.....
Lodgers kept.....	177	.....	7	28	29	30	38	20	14	5	5	1	.....
1 lodger.....	30	.....	7	13	5	4	.....	1	.....	.....	.....	.....	.....
2 lodgers.....	65	.....	.....	15	15	9	16	6	3	1	.....	.....	.....
3 lodgers.....	27	.....	.....	.....	9	9	5	3	1	.....	.....	.....	.....
4 lodgers.....	35	.....	.....	.....	.....	8	11	4	8	1	3	.....	.....
5 lodgers.....	9	.....	.....	.....	.....	.....	6	1	.....	2	.....	.....	.....
6 lodgers.....	10	.....	.....	.....	.....	.....	.....	5	2	1	1	1	.....
7 lodgers.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....

TABLE 33.—*Births during selected year in families of specified number of persons, according to total family earnings and nationality of mother.*

Total family earnings and nationality of mother.	Births during selected year in—										
	All families.	Families of specified number of persons.									
		1	2	3	4	5	6	7	8	9 or more.	Not reported. ^b
All mothers.....	2, 197	5	582	527	355	291	170	120	69	68	10
Under \$550.....	639	3	153	153	115	95	58	37	15	6	4
\$550 to \$849.....	301	.....	70	73	53	50	22	13	12	8	.....
\$850 to \$1,049.....	446	.....	127	106	65	60	37	27	11	10	3
\$1,050 to \$1,249.....	331	.....	109	83	50	34	22	17	5	11	.....
\$1,250 and over.....	182	.....	54	44	23	20	9	14	7	11	.....
No earnings and not reported.....	247	1	59	60	41	25	17	9	14	18	3
.....	51	1	10	8	8	7	5	3	5	4	.....
Native mothers.....	718	3	256	202	107	52	31	24	18	18	7
Under \$550.....	69	2	28	21	7	5	2	.....	1	1	2
\$550 to \$849.....	58	.....	21	18	7	7	2	.....	2	1	.....
\$850 to \$1,049.....	164	.....	54	47	25	13	12	8	1	2	2
\$1,050 to \$1,249.....	156	.....	68	39	27	7	4	7	2	2	.....
\$1,250 and over.....	99	.....	36	29	10	8	1	4	5	6	.....
Not reported.....	160	1	44	44	31	11	10	5	6	5	3
.....	12	.....	5	4	.....	1	.....	.....	1	1	.....
Foreign-born mothers.....	1, 479	2	326	325	248	239	139	96	51	50	3
Under \$550.....	570	1	125	132	108	90	56	37	14	5	2
\$550 to \$849.....	243	.....	49	55	46	43	20	13	10	7	.....
\$850 to \$1,049.....	282	.....	73	59	40	47	25	19	10	8	1
\$1,050 to \$1,249.....	175	.....	41	44	23	27	18	10	3	9	.....
\$1,250 and over.....	83	.....	18	15	13	12	8	10	2	5	.....
No earnings and not reported.....	87	.....	15	16	10	14	7	4	8	13	.....
.....	39	1	5	4	8	6	5	3	4	3	.....
Italian mothers.....	651	1	128	127	114	109	67	47	26	29	3
Under \$550.....	339	1	70	74	66	53	36	22	11	4	2
\$550 to \$849.....	112	.....	21	23	18	19	9	9	7	6	.....
\$850 to \$1,049.....	102	.....	21	14	17	19	10	9	5	6	1
\$1,050 to \$1,249.....	47	.....	8	10	6	9	6	3	1	4	.....
\$1,250 and over.....	16	.....	5	2	2	1	2	1	.....	3	.....
No earnings and not reported.....	20	.....	1	4	1	4	2	2	.....	6	.....
.....	15	.....	2	.....	4	4	2	1	2	.....	.....
Lithuanian mothers.....	267	.....	80	65	42	47	12	14	4	3	.....
Under \$550.....	116	.....	27	33	18	23	7	6	1	1	.....
\$550 to \$849.....	54	.....	17	11	12	9	3	2	.....	.....	.....
\$850 to \$1,049.....	46	.....	23	11	4	5	.....	2	.....	1	.....
\$1,050 to \$1,249.....	21	.....	7	5	4	4	.....	1	.....	.....	.....
\$1,250 and over.....	10	.....	1	2	2	2	.....	2	.....	1	.....
Not reported.....	12	.....	4	1	1	2	2	.....	2	.....	.....
.....	8	.....	1	2	1	2	.....	1	1	.....	.....
Irish mothers.....	200	.....	21	50	34	39	23	13	11	9	.....
Under \$550.....	45	.....	3	10	12	6	7	5	2	.....	.....
\$550 to \$849.....	30	.....	2	6	8	8	2	1	2	1	.....
\$850 to \$1,049.....	49	.....	5	14	6	12	6	3	3	.....	.....
\$1,050 to \$1,249.....	39	.....	8	13	4	5	3	2	1	3	.....
\$1,250 and over.....	18	.....	1	4	1	4	5	2	.....	1	.....
No earnings and not reported.....	16	.....	2	3	2	4	.....	.....	2	3	.....
.....	3	.....	.....	.....	1	.....	.....	.....	1	1	.....
Other foreign-born mothers.....	361	1	97	83	58	44	37	22	10	9	.....
Under \$550.....	70	.....	25	15	12	8	6	4	.....	.....	.....
\$550 to \$849.....	47	.....	9	15	8	7	6	1	1	.....	.....
\$850 to \$1,049.....	85	.....	24	20	13	11	9	5	2	1	.....
\$1,050 to \$1,249.....	68	.....	18	16	9	9	9	4	1	2	.....
\$1,250 and over.....	39	.....	11	7	8	5	1	5	2	.....	.....
No earnings and not reported.....	39	.....	8	8	6	4	3	2	4	4	.....
.....	13	1	2	2	2	.....	3	1	.....	2	.....

^a Excluding infant born during selected year.^b Including 1 mother, a servant, not living as a member of family.

TABLE 34.—Mothers reporting specified number of births resulting from all pregnancies, by nationality of mother.

Nationality of mother.	Number of mothers.																
	Total.	Reporting specified number of births, all pregnancies. ^a															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	18
All mothers.....	2, 155	489	428	335	270	206	132	100	76	47	38	14	14	3	1	1	1
Native mothers.....	704	223	179	112	65	38	31	15	18	11	8	2	2	.....	.....	.....	.....
Foreign-born mothers.....	1, 451	266	249	223	205	168	101	85	58	36	30	12	12	3	1	1	1
Italian.....	634	101	88	106	89	75	50	41	34	20	16	6	6	2	.....	.....	.....
Lithuanian.....	263	67	49	32	37	26	16	13	7	4	5	2	2	1	.....	1	1
Irish.....	197	19	39	81	37	24	12	14	7	8	3	1	1	.....	1	.....	.....
Slavic ^b	91	21	17	13	17	12	8	4	2	1	1	.....	.....	.....	.....	.....	.....
Jewish.....	59	11	10	16	6	10	4	1	1	.....	.....	.....	.....	.....	.....	.....	.....
German.....	57	9	22	8	6	2	2	5	.....	1	.....	.....	2	.....	.....	.....	.....
French Canadian.....	55	9	9	5	4	8	7	3	3	.....	4	2	1	.....	.....	.....	.....
English, Scotch, and Welsh ^c	40	15	5	7	3	6	1	2	.....	.....	.....	1	.....	.....	.....	.....	.....
All other ^d	55	14	10	5	6	5	6	2	4	2	1	.....	.....	.....	.....	.....	.....

^a Excluding miscarriages.^b Including 65 Polish, 20 Russian, 2 Slovak, 2 Bohemian, 1 Serbo-Croatian, and 1 Ruthenian.^c Including 18 English, 21 Scotch, and 1 Welsh.^d Including 24 Swedish, 7 English Canadian, 6 French, 5 Magyar, 3 Danish, 3 Syrian, 2 Greek, 2 Norwegian, 1 Dutch, 1 Spanish, and 1 West Indian Black.**TABLE 35.—Births during selected year to foreign-born mothers resident in United States specified number of years, according to nationality of mother.**

Nationality of mother.	Births during selected year to foreign-born mothers.							
	Total.	Resident in United States specified number of years.						
		Under 3.	3 to 5	6 to 8	9 to 11	12 to 14	15 and over.	Not reported.
All foreign-born mothers.....	1, 479	195	272	303	245	166	288	10
Italian.....	651	114	137	137	108	65	86	4
Lithuanian.....	267	34	75	70	47	20	19	2
Irish.....	200	2	12	22	37	43	82	2
Slavic ^a	91	21	16	26	17	5	6	.....
Jewish.....	61	8	12	15	8	4	14	.....
German.....	58	4	10	11	6	8	18	1
French Canadian.....	56	.....	3	4	6	8	35	.....
English, Scotch, and Welsh ^b	40	8	2	9	5	1	15	.....
All other ^c	55	4	5	9	11	12	13	1

^a Including 65 Polish, 20 Russian, 2 Slovak, 2 Bohemian, 1 Serbo-Croatian, and 1 Ruthenian.^b Including 18 English, 21 Scotch, and 1 Welsh.^c Including 20 Scandinavian, 7 English Canadian, 6 French, 5 Magyar, 3 Syrian, 2 Greek, 1 Dutch, 1 Spanish, and 1 West Indian Black.

TABLE 36.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, according to number of tenements in dwelling.

Tenements in dwelling.	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^a	Stillbirths.	
					Num-ber.	Per cent of total births. ^a
All dwellings.....	2,197	2,144	263	122.7	53	2.4
Tenements in dwelling:						
1.....	220	216	19	88.0	4	1.8
2.....	478	466	47	100.9	12	2.5
3.....	667	650	67	103.1	17	2.5
4.....	176	172	30	174.4	4	2.3
5.....	64	63	11	.....	1	.....
6.....	303	296	44	148.6	7	2.3
7.....	27	27	4	.....	.....	.....
8.....	73	73	10	.....	.....	.....
9.....	35	33	6	.....	2	.....
10.....	10	9	1	.....	1	.....
11.....	8	8	1	.....	.....	.....
12.....	75	70	11	.....	5	.....
13.....	7	7	3	.....	.....	.....
14.....	9	9	1	.....	.....	.....
15.....	7	7	4	.....	.....	.....
16.....	15	15	3	.....	.....	.....
17.....	2	2	.....	.....	.....	.....
18.....	14	14	.....	.....	.....	.....
20.....	1	1	1	.....	.....	.....
26.....	1	1	.....	.....	.....	.....
Not reported.....	5	5	.....	.....	.....	.....

^a Not shown where base is less than 100.

TABLE 37.—Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, according to average number of persons per room.

Persons ^a per room.	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^b	Stillbirths.	
					Num-ber.	Per cent of total births. ^b
Total.....	2,197	2,144	263	122.7	53	2.4
Less than 1.....	827	812	82	101.0	15	1.8
1 but less than 2.....	1,150	1,118	153	136.9	32	2.8
2 but less than 3.....	206	201	26	129.4	5	2.4
3 but less than 4.....	3	3	1	.....	.....	.....
Not reported.....	11	10	1	.....	1	.....

^a Excluding infant born during selected year.

^b Not shown where base is less than 100.

TABLE 33.—Births during selected year in dwellings of specified number of rooms, according to number of persons to dwelling and nativity of mother.

Persons ^a to dwelling and nativity of mother	Births during selected year.													
	In dwellings of specified number of rooms.													Not re- ported.
	Total.	2	3	4	5	6	7	8	9	10	11	12	16	
All mothers.....	2,197	25	298	796	681	236	64	48	21	11	2	5	2	8
Persons to dwelling:														
2.....	280	11	49	97	95	26	1	.....	1	.....	.....	.....	.....	.....
3.....	362	5	63	136	106	30	11	5	3	2	.....	.....	.....	1
4.....	372	5	69	117	126	39	9	5	4	1	1	.....	1	1
5.....	342	3	63	130	91	25	9	11	3	4	1	1	.....	1
6.....	281	.....	27	119	87	29	12	6	.....	.....	.....	1	.....	.....
7.....	208	1	18	85	66	25	7	3	2	.....	.....	.....	.....	1
8.....	140	.....	8	55	38	27	4	3	3	2	.....	.....	.....	.....
9.....	107	.....	1	32	47	14	5	4	2	1	.....	.....	.....	1
10.....	50	.....	.....	12	16	11	3	6	1	.....	.....	.....	1	.....
11.....	26	.....	.....	10	8	5	1	1	.....	1	.....	.....	.....	.....
12 or more.....	23	.....	.....	1	6	5	2	4	2	.....	.....	3	.....	.....
Not reported.....	6	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	3
Native mothers.....	718	4	36	164	280	125	39	28	15	8	1	4	1	3
Persons to dwelling:														
2.....	152	4	14	47	64	21	1	.....	1	.....	.....	.....	.....	.....
3.....	165	.....	7	48	70	29	9	4	3	1	.....	.....	.....	.....
4.....	144	.....	8	27	64	29	7	5	3	1	.....	.....	.....	.....
5.....	91	.....	4	15	37	13	6	7	3	4	1	1	.....	.....
6.....	55	.....	2	12	18	12	5	5	.....	.....	.....	1	.....	.....
7.....	34	.....	.....	3	14	10	4	2	1	.....	.....	.....	.....	.....
8.....	31	.....	1	4	7	12	4	2	1	.....	.....	.....	.....	.....
9.....	26	.....	.....	5	12	3	3	.....	2	1	.....	.....	.....	.....
10.....	7	.....	.....	1	3	.....	.....	1	1	.....	.....	.....	1	.....
11.....	5	.....	.....	2	.....	2	.....	.....	.....	1	.....	.....	.....	.....
12 or more.....	4	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	2	.....	.....
Not reported.....	4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	3
Foreign-born mothers.....	1,479	21	262	632	391	111	25	20	6	3	1	1	1	5
Persons to dwelling:														
2.....	128	7	35	50	31	5	.....	.....	.....	.....	.....	.....	.....	.....
3.....	197	5	56	88	36	7	2	1	.....	1	.....	.....	.....	1
4.....	228	5	61	90	56	10	2	.....	1	.....	1	.....	1	1
5.....	251	3	59	115	54	12	3	4	.....	.....	.....	.....	.....	1
6.....	226	.....	25	107	69	17	7	1	.....	.....	.....	.....	.....	.....
7.....	174	1	18	82	52	15	3	1	1	.....	.....	.....	.....	1
8.....	109	.....	7	51	31	15	.....	1	2	2	.....	.....	.....	.....
9.....	81	.....	1	27	35	11	2	4	.....	.....	.....	.....	.....	1
10.....	43	.....	.....	11	13	11	3	5	.....	.....	.....	.....	.....	.....
11.....	21	.....	.....	8	8	3	1	1	.....	.....	.....	.....	.....	.....
12 or more.....	19	.....	.....	1	6	5	2	2	2	.....	.....	1	.....	.....
Not reported.....	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

^a Excluding infant born during selected year.

TABLE 39.—Births during selected year in each ward of residence, according to sanitary condition of dwelling.

Sanitary condition of dwelling.	Total. births.	Ward of residence.				
		1	2	3	4	5
Total dwellings ^a	2,197	460	336	493	585	323
Water supply:						
City.....	2,032	439	289	445	565	294
Spring.....	37	.....	23	2	8	4
Well or cistern.....	123	19	24	46	11	23
Not reported.....	5	2	.....	.....	1	2
Type of toilet:						
Water-closet.....	1,962	434	286	436	527	279
Privy.....	232	25	50	56	58	43
No toilet.....	1	.....	.....	1	.....	.....
Not reported.....	2	1	.....	.....	.....	1
Location of toilet:						
In dwelling.....	1,574	404	258	374	357	181
Not in dwelling.....	619	55	78	118	227	141
No toilet.....	1	.....	.....	1	.....	.....
Not reported.....	3	1	.....	.....	1	1
Sewer connection:						
Sink connected.....	1,884	406	276	404	530	268
Sink not connected.....	309	52	59	89	55	54
Not reported.....	4	2	1	.....	.....	1
Toilet connected.....	1,854	404	273	397	518	262
Toilet not connected.....	338	54	62	95	67	60
Not reported.....	5	2	1	1	.....	1

^a Dwelling means place in which family lived during greater part of year following birth of infant, or, in case of stillborn child, where mother spent the greater part of her pregnancy period.

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TABLE 40.—*Births during selected year, infant deaths, infant mortality rate, and per cent of stillbirths, according to tenure and rental of home and nativity of mother.*

Tenure and rental of home and nativity of mother.	Total births.	Live births.	Infant deaths.	Infant mortality rate. ^a	Stillbirths.	
					Num-ber.	Per cent of total births. ^a
All mothers.....	2,197	2,144	263	122.7	53	2.4
Home owned.....	265	262	24	91.6	3	1.1
By infant's family.....	221	218	22	100.9	3	1.4
By other family in infant's household.....	44	44	2		4	
Home not owned.....	1,924	1,875	237	126.4	49	2.5
Monthly rental:						
Under \$5.....	2	2				
\$5 but less than \$10.....	440	428	75	175.2	12	2.7
\$10 but less than \$15.....	972	947	115	121.4	25	2.6
\$15 but less than \$20.....	359	348	34	97.7	11	3.1
\$20 but less than \$25.....	58	58	5			
\$25 but less than \$35.....	45	44	2		1	
\$35 but less than \$50.....	14	14				
\$50 or over.....	1	1				
Free.....	2	2	1			
Not reported.....	31	31	5			
Boarding.....	6	5	2		1	
Not reported.....	2	2				
Native mothers.....	718	705	69	97.9	13	1.8
Home owned.....	108	107	8	74.8	1	.9
By infant's family.....	79	78	6		1	
By other family in infant's household.....	29	29	2			
Home not owned.....	608	596	61	102.3	12	2.0
Monthly rental:						
\$5 but less than \$10.....	68	67	9		1	
\$10 but less than \$15.....	231	228	24	105.3	3	1.3
\$15 but less than \$20.....	209	202	19	94.1	7	3.3
\$20 but less than \$25.....	35	35	4			
\$25 but less than \$35.....	37	36	1		1	
\$35 but less than \$50.....	10	10				
\$50 or over.....	1	1				
Free.....	1	1				
Not reported.....	16	16	4			
Not reported.....	2	2				
Foreign-born mothers.....	1,479	1,439	194	134.8	40	2.7
Home owned.....	157	155	16	103.2	2	1.3
By infant's family.....	142	140	16	114.3	2	1.4
By other family in infant's household.....	15	15				
Home not owned.....	1,316	1,279	176	137.6	37	2.8
Monthly rental:						
Under \$5.....	2	2				
\$5 but less than \$10.....	372	361	66	182.8	11	3.0
\$10 but less than \$15.....	741	719	91	126.6	22	3.0
\$15 but less than \$20.....	150	146	15	102.7	4	2.7
\$20 but less than \$25.....	23	23	1			
\$25 but less than \$35.....	8	8	1			
\$35 but less than \$50.....	4	4				
Free.....	1	1	1			
Not reported.....	15	15	1			
Boarding.....	6	5	2		1	

^a Not shown where base is less than 100.

TABLE 41.—Buildings in selected districts, by number of apartments in building.

Apartments in building.	Buildings in—						
	All districts.	District.					
		I	II	III	IV	V	VI
All classes	211	24	56	31	62	85	8
Apartments:							
1.....	38	5	12	8	8	5	.....
2.....	67	9	26	9	13	9	1
3.....	29	7	9	2	9	2	.....
4.....	20	1	5	3	7	4	.....
5.....	11	.....	2	2	7	.....	.....
6.....	22	2	2	4	6	8	.....
8 or over.....	24	.....	.....	3	12	7	2

* Including one building in which three apartments were used as one. In other tables this has been entered as a single household.

TABLE 42.—Apartments in selected districts, by number of rooms in apartment.

Rooms in apartment.	Apartments in—						
	All districts.	District.					
		I	II	III	IV	V	VI
All classes	811	60	133	111	304	177	26
Rooms in apartment:							
1.....	1	.....	.....	1	.....	.....	.....
2.....	30	1	16	.....	9	4	.....
3.....	153	3	20	32	52	36	10
4.....	276	18	58	23	94	81	2
5.....	164	13	18	33	72	28	.....
6.....	69	8	5	12	40	4	.....
7.....	28	3	6	3	8	2	6
8.....	14	2	2	2	3	4	1
9 or over.....	7	1	1	1	3	1	.....
Not reported.....	1	.....	.....	.....	1	.....	.....
Vacant.....	68	11	7	4	22	17	7

* Three apartments combined and used as one.

TABLE 43.—Households in selected districts, according to nationality and color of head of household.

Nationality and color of head of household.	Households in—						
	All districts.	District.					
		I	II	III	IV	V	VI
All nationalities.....	743	49	126	107	282	160	19
Native.....	33	7	7	10	3	2	4
White.....	27	3	7	10	3	.....	4
Black.....	6	4	.....	.....	.....	2	.....
Foreign-born.....	709	42	119	97	278	158	15
Italian.....	408	32	36	36	148	156	.....
Lithuanian.....	165	.....	46	4	115	.....	.....
Irish.....	50	7	33	1	7	1	1
Polish.....	26	.....	2	17	.....	.....	7
Jewish.....	35	.....	.....	32	2	1	.....
All other ^a	25	3	2	7	6	.....	7
Not reported.....	1	.....	.....	.....	1	.....	.....

^a Including 11 French Canadian, 5 Russian, 5 German, 3 English, and 1 Swedish.

TABLE 44.—Persons in selected districts, according to family status.

Family status.	Persons in--						
	All districts.	District.					
		I	II	III	IV	V	VI
All classes.....	5,043	351	765	632	1,917	1,268	110
Adults (in family).....	2,060	128	388	294	773	427	50
Adults (lodgers).....	1,478	133	126	128	592	484	15
Children.....	1,475	90	251	210	522	357	45
Status not reported.....	30	.....	.....	.....	30	.....	.....

TABLE 45.—Total monthly minimum and maximum rental and average per room and per apartment, by number of rooms in apartment—selected districts.^a

Rooms per apartment.	Number of apartments.	Monthly rental.			
		Minimum.	Maximum.	Average per—	
				Room.	Apartment.
1.....	1	\$4.00	\$4.00	\$4.00	\$4.00
2.....	24	3.00	8.00	2.85	5.70
3.....	141	4.00	14.00	3.01	9.05
4.....	259	6.00	16.00	2.76	11.05
5.....	149	7.00	20.00	2.70	13.50
6.....	59	8.00	32.00	2.62	15.72
7.....	17	10.00	17.00	1.85	12.97
8.....	10	10.00	20.00	1.88	15.00
9.....	3	14.00	18.00	1.80	16.16
11.....	1	^b 26.00	^b 26.00	.....	.....

^a Excluding 3 cases of free rent, 54 of owned property, and 90 for which there was no report.
^b Combined rental for 3 apartments used as one.

TABLE 46.—Measured sleeping rooms in selected districts occupied by specified numbers of children or adults, according to actual cubic contents and fulfillment of legal minimum requirements.^a

Cubic contents of room.	Sleeping rooms occupied by—													Total measured sleeping rooms.
	1 chld.	1 adult.	2 children.	1 adult, 1 child.	3 children.	1 adult, 2 children.	2 adults.	1 adult, 3 children.	4 children.	2 adults, 1 child.	3 adults.	5 children.	2 adults, 3 children.	
	300	500	600	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,500	1,600	
Legally required cubic contents.....feet.....	300	500	600	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,500	1,600	2,000
All classes.....	8	46	23	61	31	318	49	10	199	29	103	8	129	69
Cubic feet:														
Less than 300.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
300 to 499.....	23	8	2	2	1	7	2	1	1	1	1	1	1	1
500 to 599.....	50	16	3	6	1	14	1	1	4	1	1	1	1	1
600 to 799.....	232	4	12	25	9	81	15	1	36	5	9	3	14	1
800 to 899.....	161	2	2	7	10	65	8	1	24	2	15	1	9	3
900 to 999.....	155	1	1	11	4	51	5	1	35	3	11	3	12	4
1,000 to 1,099.....	164	2	2	4	2	49	6	2	32	3	17	1	23	7
1,100 to 1,199.....	158	2	2	4	2	28	8	2	29	4	16	1	27	16
1,200 to 1,299.....	84	1	1	2	2	14	1	2	14	3	9	1	12	9
1,300 to 1,399.....	66	1	1	2	1	6	2	2	8	4	8	1	7	10
1,400 to 1,499.....	44	1	1	1	1	1	3	1	9	1	10	1	8	3
1,500 to 1,599.....	30	1	1	1	1	2	1	1	5	1	3	1	8	5
1,600 to 1,699.....	20	1	1	1	1	2	1	1	3	2	3	1	5	3
1,700 to 1,799.....	7	1	1	1	1	1	1	1	1	1	1	1	1	2
1,800 to 1,899.....	5	1	1	1	1	1	1	1	1	1	1	1	1	4
1,900 to 1,999.....	4	1	1	1	1	1	1	1	1	1	1	1	1	2
2,000 to 2,099.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2,200 to 2,299.....	4	1	1	1	1	1	1	1	1	1	1	1	1	1
2,600 to 2,699.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1

^a Rooms to left of black line in distribution table fulfill legal minimum requirements of cubic contents for occupants specified.

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TABLE 46.—Measured sleeping rooms in selected districts occupied by specified numbers of children or adults, according to actual cubic contents and fulfillment of legal minimum requirements^a—Continued.

Cubic contents of room.	Sleeping rooms occupied by—												
	3 adults, 2 children.	2 adults, 4 children.	4 adults, 1 child.	3 adults, 3 children.	2 adults, 5 children.	5 adults.	4 adults, 2 children.	3 adults, 4 children.	5 adults, 1 child.	2 adults, 6 children.	6 adults.	3 adults, 5 children.	7 adults.
Legally required cubic contents.....feet.	2, 100	2, 200	2, 300	2, 400	2, 500	2, 500	2, 600	2, 700	2, 800	2, 800	3, 000	3, 000	3, 500
All classes.....	13	9	6	1	1	11	1	2	1	1	6	1	1
Cubic feet:													
Less than 300.....													
300 to 499.....													
500 to 599.....	1												
600 to 799.....													
800 to 899.....	1	1			1								
900 to 999.....	3	1	1			1							
1,000 to 1,099.....		2	1			1							
1,100 to 1,199.....		2											
1,200 to 1,299.....	3	2	2			1			1	1	2	1	
1,300 to 1,399.....													
1,400 to 1,499.....	2	2	1			4	1	1			1		
1,500 to 1,599.....	1					2							
1,600 to 1,699.....	1			1		2					1		
1,700 to 1,799.....											1		1
1,800 to 1,899.....													
1,900 to 1,999.....													
2,000 to 2,099.....													
2,200 to 2,299.....								1			1		
2,600 to 2,699.....	1												

^a Rooms to left of black line in distribution table fulfill legal minimum requirements of cubic contents for occupants specified.

TABLE 47.—Persons and toilets in selected districts, according to specified number of persons per toilet and type and location of toilet.

Type and location of toilet.	Total.		Number of persons per toilet.													
			Less than 5.		5 to 9		10 to 14		15 to 19		20 to 24		25 and more.		Not reported.	
	Toi-lets.	Per-sons.	Toi-lets.	Per-sons.	Toi-lets.	Per-sons.	Toi-lets.	Per-sons.	Toi-lets.	Per-sons.	Toi-lets.	Per-sons.	Toi-lets.	Per-sons.	Toi-lets.	Per-sons.
All toilets..	620	5,043	97	304	355	2,496	117	1,350	28	454	10	216	8	216	5	7
Privies.....	45	476	7	23	16	115	11	133	8	130	2	43	1	32	.....	.....
Water-closets.....	575	4,567	90	281	339	2,381	106	1,217	20	324	8	173	7	184	5	7
Location:																
In apartment	390	2,730	71	231	254	1,771	57	634	6	94	.....	.....	.....	.....	2	.....
In hall.....	125	1,278	11	28	55	399	38	447	9	146	8	173	3	83	1	2
In cellar.....	30	218	5	12	19	126	4	49	2	31
On porch.....	18	194	1	2	7	52	7	87	3	53
In yard.....	12	147	2	8	4	33	4	101	2	5

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